## QUALITY PROFILES  - SUMMARY GRAPH

### Institute of Information Theory and Automation of the CAS, v. v. i.



**Quality Groups:**
**(1)**: Quality that is **world-leading** in terms of originality, significance and rigour.
**(2)**: Quality that is **internationally excellent** in terms of originality, significance and rigour but which falls short of the highest standards of excellence.
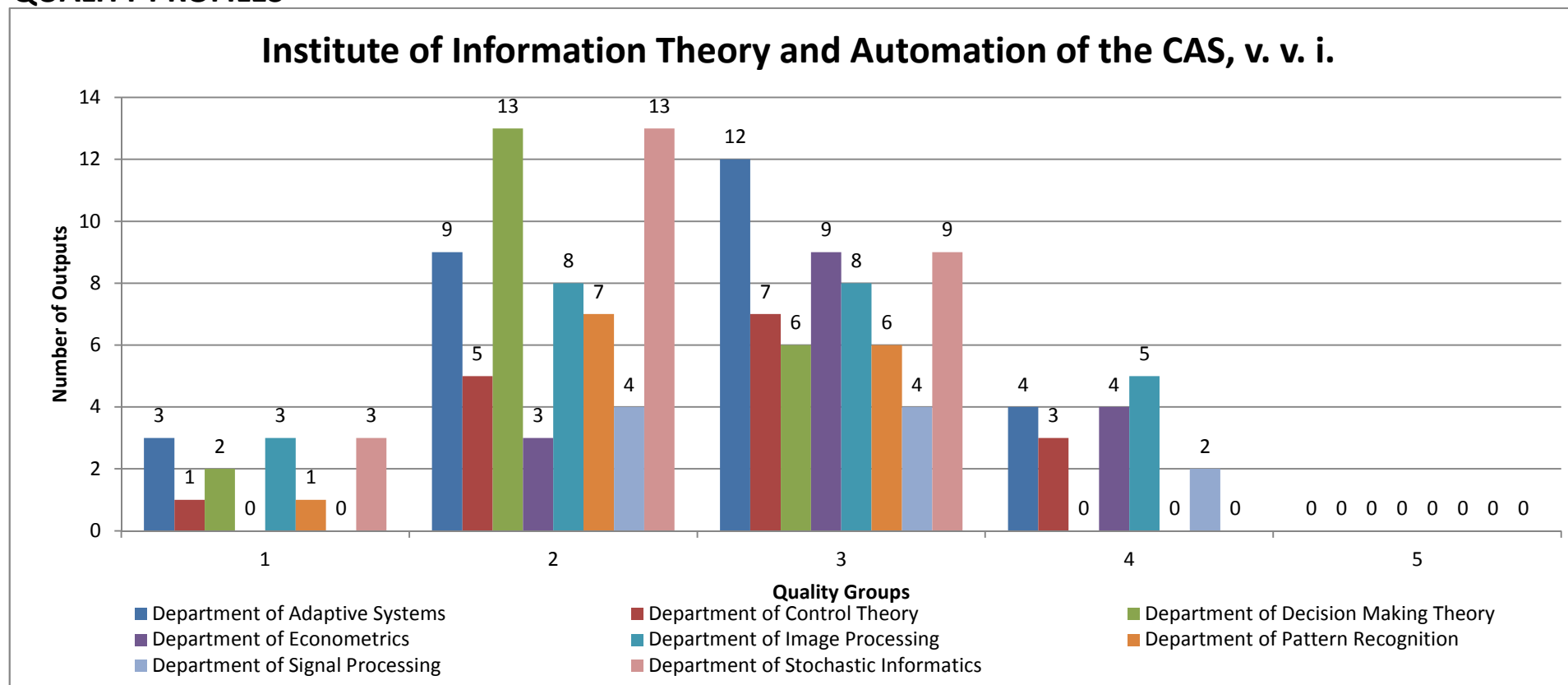**(3)**: Quality that is **recognized internationally** in terms of originality, significance and rigour.
**(4)**: Quality that is **recognized nationally** in terms of originality, significance and rigour.
**(5)**: Quality that falls  **below the standard** of nationally recognized work. Or work which does not meet the published definition of research for the purposes of this assessment.

This plot is presented as an aggregate of data from the Phase I of evaluation for convenience of evaluators in the Phase II.

## QUALITY PROFILES

### Institute of Information Theory and Automation of the CAS, v. v. i.



Legend:
- Department of Adaptive Systems
- Department of Control Theory
- Department of Decision Making Theory
- Department of Econometrics
- Department of Image Processing
- Department of Pattern Recognition
- Department of Signal Processing
- Department of Stochastic Informatics

**Quality Groups:**

**(1)**: Quality that is **world-leading** in terms of originality, significance and rigour.

**(2)**: Quality that is **internationally excellent** in terms of originality, significance and rigour but which falls short of the highest standards of excellence.
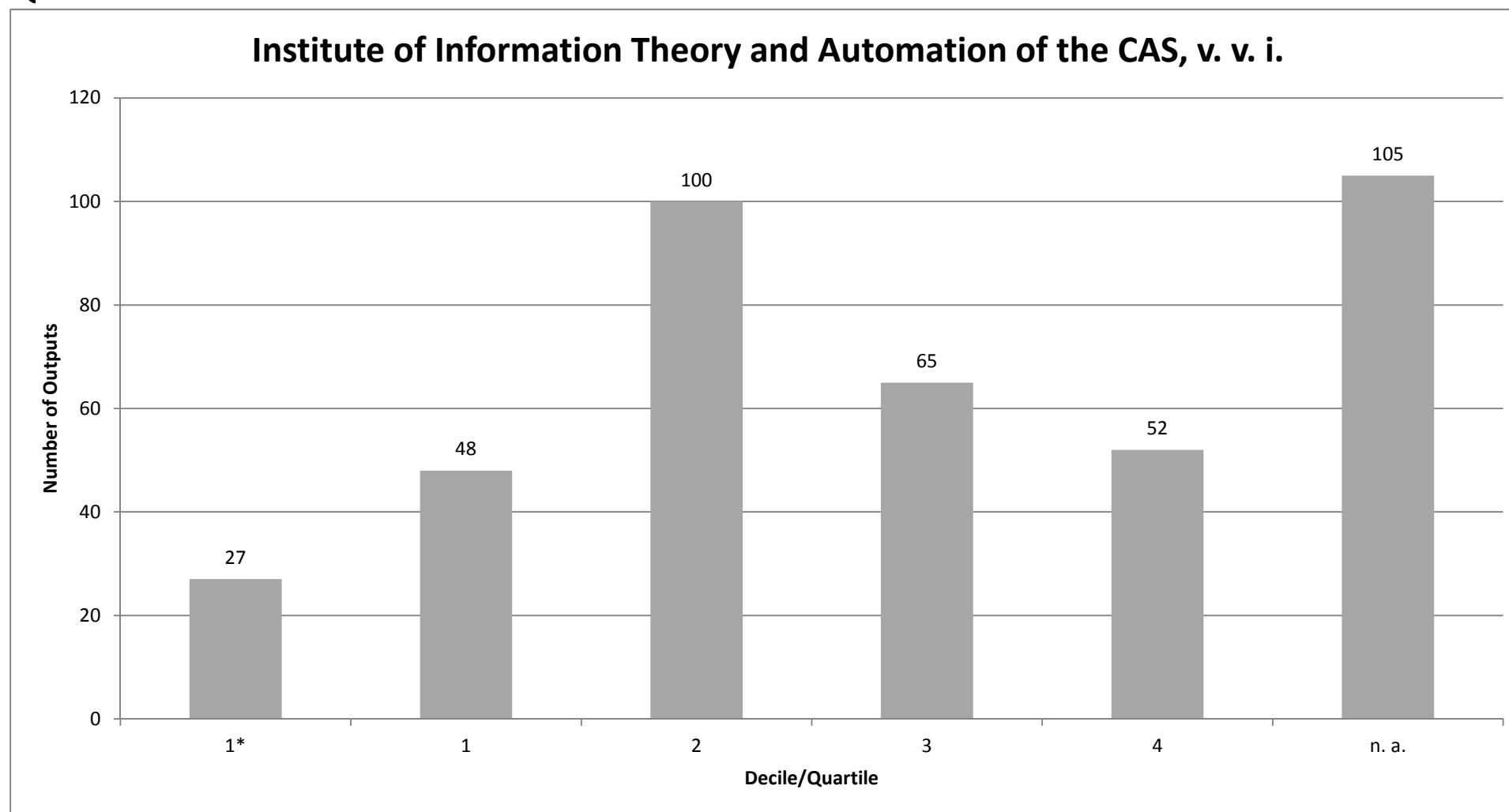
**(3)**: Quality that is **recognized internationally** in terms of originality, significance and rigour.

**(4)**: Quality that is **recognized nationally** in terms of originality, significance and rigour.

**(5)**: Quality that falls **below the standard** of nationally recognized work. Or work which does not meet the published definition of research for the purposes of this assessment.

This plot is presented as an aggregate of data from the Phase I of evaluation for convenience of evaluators in the Phase II; the columns represent outputs (not productivity) and cannot be directly compared each other.
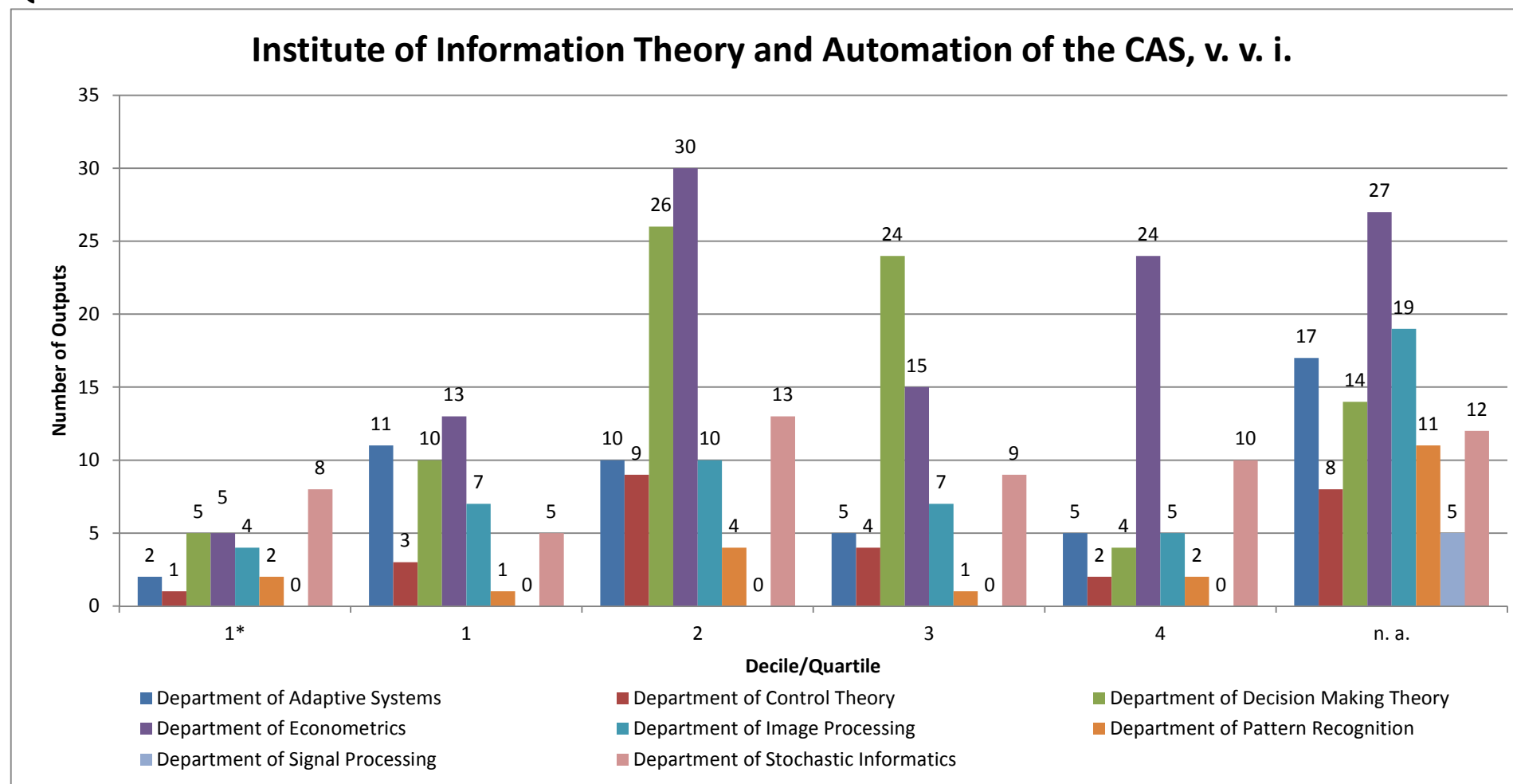
## QUALITY OF OUTPUTS BY JOURNALS - SUMMARY GRAPH

### Institute of Information Theory and Automation of the CAS, v. v. i.



Number of outputs in top decile (1*) and quartiles (1-4) by AIS of journals; n. a. - outputs in journals without AIS; if the output is assigned to more than one field, the mean value of quartile is taken (values from 0,1 to 0,5 rounded down).

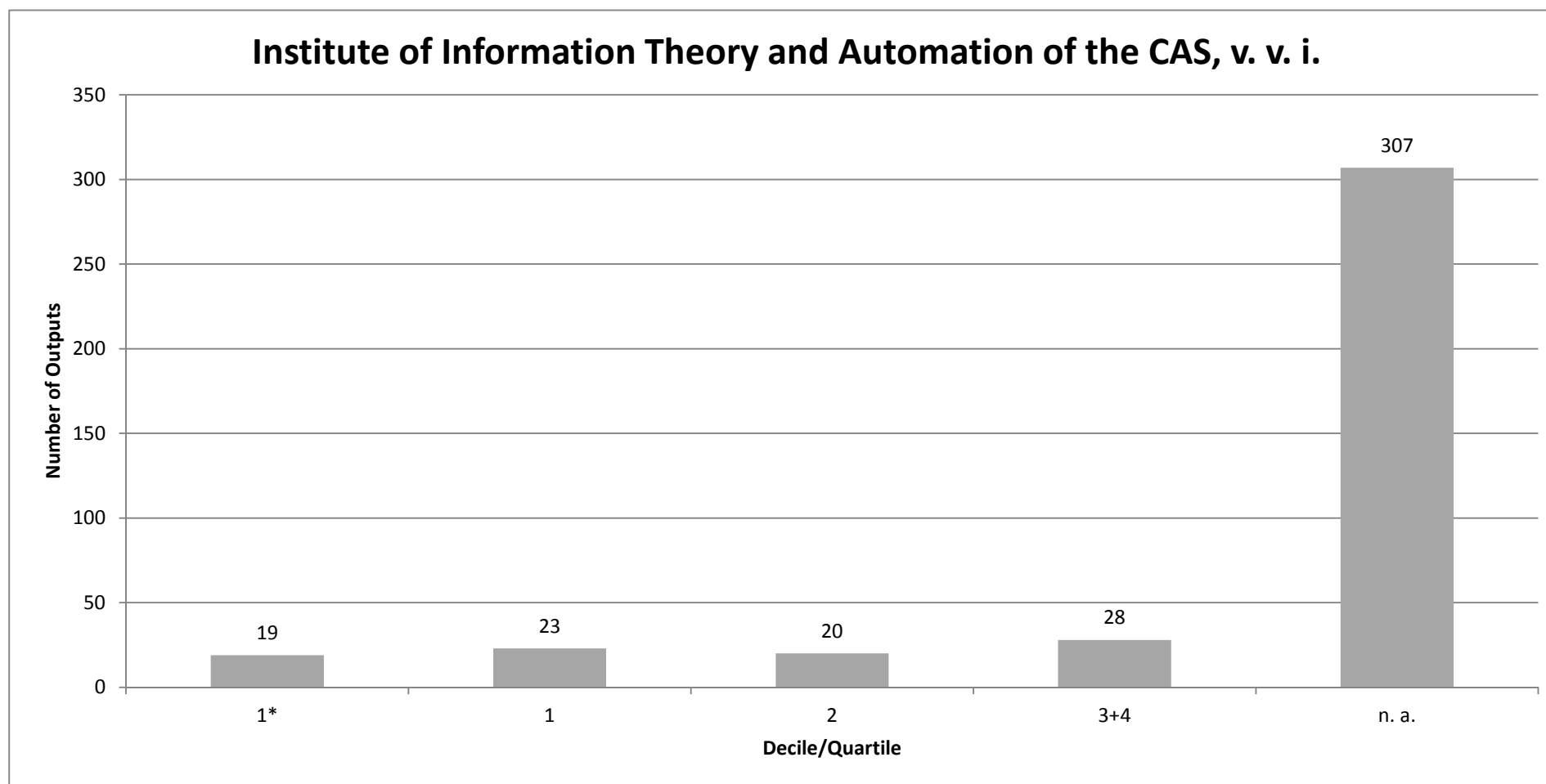This plot is presented as an aggregate of bibliometric data for convenience of evaluators.

## QUALITY OF OUTPUTS BY JOURNALS

### Institute of Information Theory and Automation of the CAS, v. v. i.



**Number of Outputs** (y-axis), **Decile/Quartile** (x-axis)

Legend:
- Department of Adaptive Systems
- Department of Control Theory
- Department of Decision Making Theory
- Department of Econometrics
- Department of Image Processing
- Department of Pattern Recognition
- Department of Signal Processing
- Department of Stochastic Informatics

Number of outputs in top decile (1*) and quartiles (1-4) by AIS of journals; n. a. - outputs in journals without AIS; if the output is assigned to more than one field, the mean value of quartile is taken (values from 0,1 to 0,5 rounded down).

This plot is presented as an aggregate of bibliometric data for convenience of evaluators; the columns represent outputs (not productivity) and cannot be directly compared each other.
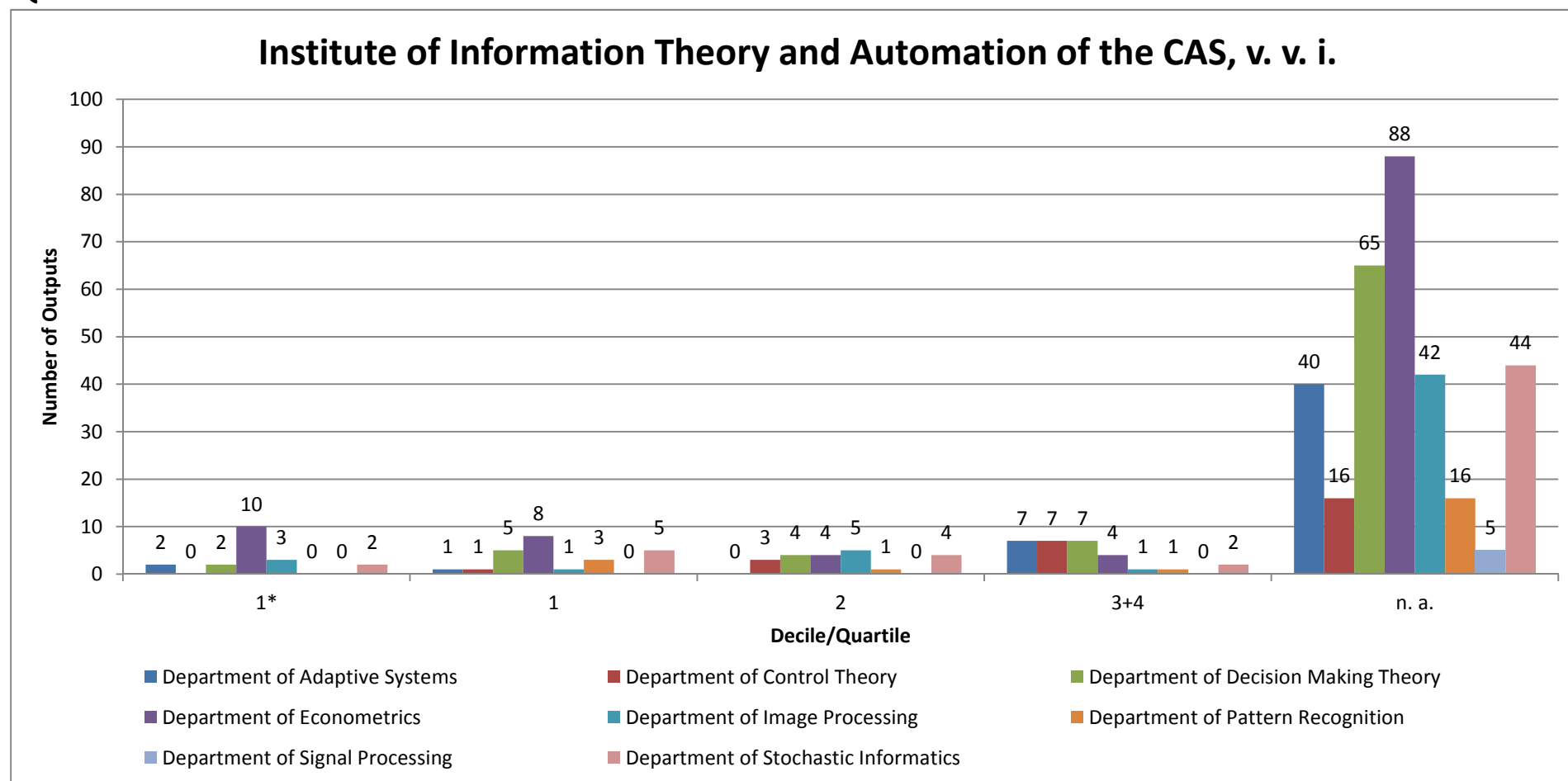
## QUALITY OF OUTPUTS BY INTENSITY OF CITATIONS  - SUMMARY GRAPH

### Institute of Information Theory and Automation of the CAS, v. v. i.



Number of outputs in the top decile (1*) and in quartiles (1, 2, 3+4) of the list of outputs ordered by the number of citations; n. a. - the number of outputs in the field is low and/or the number of citations is not sufficient for relevant judgement; if the output is assigned to more than one field, the mean value of quartile is taken (values from 0,1 to 0,5 rounded down).

This plot is presented as an aggregate of bibliometric data for convenience of evaluators.

## QUALITY OF OUTPUTS BY INTENSITY OF CITATIONS

### Institute of Information Theory and Automation of the CAS, v. v. i.



Number of outputs in the top decile (1*) and in quartiles (1, 2, 3+4) of the list of outputs ordered by the number of citations; n. a. - the number of outputs in the field is low and/or the number of citations is not sufficient for relevant judgement; if the output is assigned to more than one field, the mean value of quartile is taken (values from 0,1 to 0,5 rounded down).

This plot is presented as an aggregate of bibliometric data for convenience of evaluators; the columns represent outputs (not productivity) and cannot be directly compared each other.

**Evaluation of the Research and Professional Activities of the Institutes of the Czech Academy of Sciences for 2010–2014**
**RESULTS OF THE PHASE I. AND BIBLIOMETRIC PARAMETERS**

| | |
|---|---|
| **Institute:** | Institute of Information Theory and Automation of the CAS, v. v. i. |
| **Team:** | Department of Adaptive Systems |
| **Head:** | Ing. Tatiana Valentine Guy, Ph.D. |

**Total number of outputs :** 195 **Evaluated outputs :** 28 (0) **Outputs for bibliometry :** 50 **Large collaborations outputs:** 0
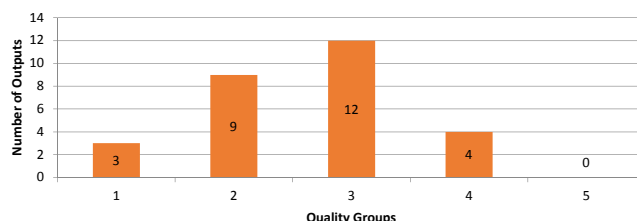
## Quality Groups of Outputs (Results of the Phase I.)

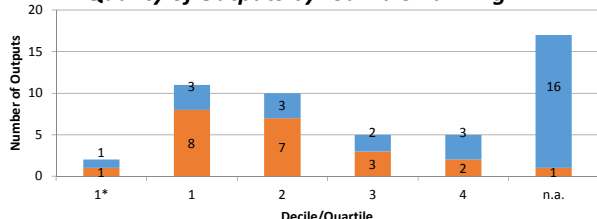| Quality | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|
| Outputs | 3 | 9 | 12 | 4 | 0 |

**Quality Groups:**
**(1):** Quality that is **world-leading** in terms of originality, significance and rigour.
**(2):** Quality that is **internationally excellent** in terms of originality, significance and rigour but which falls short of the highest standards of excellence.
**(3):** Quality that is **recognized internationally** in terms of originality, significance and rigour.
**(4):** Quality that is **recognized nationally** in terms of originality, significance and rigour.
**(5):** Quality that falls **below the standard** of nationally recognized work. Or work which does not meet the published definition of research for the purposes of this assessment.
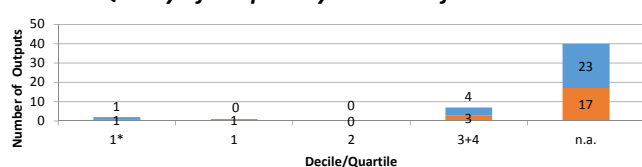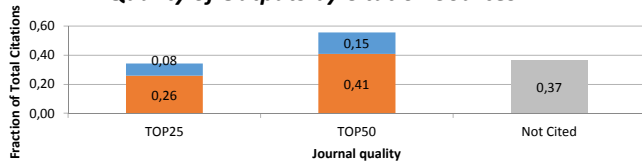
### Quality Profile



### Quality of Outputs by Journals Ranking



### Quality of Outputs by Number of Citations



### Quality of Outputs by Citation Sources



| Field Structure of Outputs | Outputs |
|---|---|
| AUTOMATION & CONTROL SYSTEMS | 15 |
| ENGINEERING, ELECTRICAL & ELECTRONIC | 7 |
| ENVIRONMENTAL SCIENCES | 4 |
| COMPUTER SCIENCE, ARTIFICIAL INTELLIGENCE | 4 |
| STATISTICS & PROBABILITY | 3 |
| COMPUTER SCIENCE, CYBERNETICS | 3 |
| ENGINEERING, INDUSTRIAL | 3 |
| ENGINEERING, MULTIDISCIPLINARY | 2 |
| COMPUTER SCIENCE, INFORMATION SYSTEMS | 2 |
| MATHEMATICS, APPLIED | 1 |
| COMPUTER SCIENCE, INTERDISCIPLINARY APPLICATIONS | 1 |
| METEOROLOGY & ATMOSPHERIC SCIENCES | 1 |
| ENGINEERING, CHEMICAL | 1 |
| TRANSPORTATION SCIENCE & TECHNOLOGY | 1 |
| MATHEMATICAL & COMPUTATIONAL BIOLOGY | 1 |
| MATHEMATICS | 1 |

**Total number of outputs:** selected types of outputs published in 2010-2014 and registered in the institutional research information system: journal article, monograph, monograph chapter, proceedings paper, patent, utility model, industrial design, prototype, functional specimen, norms and directives, specialized map, realized certified methodology, software, pilot plant, verified technology, plant breed/variety.

**Evaluated outputs:** outputs submitted by the team and evaluated in the Phase I (value in the brackets shows number of outputs submitted by the team but not evaluated in the Phase I).

**Outputs for bibliometry:** publications in 2010-2014 with less than 30 authors registered in the Web of Science; document type: article, review or proceedings paper.

**Large collaborations outputs:** publications in 2010-2014 with more than 30 authors registered in the Web of Science; document type: article, review or proceedings paper.

**Quality Profile:** number of evaluated outputs vs quality groups (5 groups); 'world-leading' quality denotes an absolute standard of quality in each field and subfield; 'world leading', 'internationally' and 'nationally' in this context refer to quality standards; they do not refer to the nature or geographical scope of particular subjects, nor to the focus of research nor its place of dissemination; for example, research which is focused on the subject specific to the Czech Republic might be of 'world leading' standard, on the contrary, work with an international focus might not be of 'world leading, internationally excellent or internationally recognized' standard.

**Quality of Outputs by Journals Ranking:** number of outputs in top decile (1*) and quartiles (1-4) by AIS of journals; n. a. - outputs in journals without AIS; if the output is assigned to more than one field, the mean value of quartile is taken (values from 0,1 to 0,5 rounded down); orange: outputs submitted by the team to the Evaluation, blue: other outputs by the team.

**Quality of Outputs by Number of Citations:** number of outputs in the top decile (1*) and in quartiles (1, 2, 3+4) of the list of outputs ordered by the number of citations; n. a. - the number of outputs in the field is low and/or the number of citations is not sufficient for relevant judgement; if the output is assigned to more than one field, the mean value of quartile is taken (values from 0,1 to 0,5 rounded down); orange: outputs submitted by the team to the Evaluation, blue: other outputs by the team.

**Quality of Outputs by Citation Sources:** fraction of citations of all outputs in the top quartile (TOP25) or the top half (TOP50) of list of journals ordered by AIS; fraction of "not cited" outputs is added; orange: outputs submitted by the team to the Evaluation, blue: other outputs by the team.

**Field Structure of Outputs:** number of outputs of the team in different fields; if the output is assigned to more than one field, the field where the publication performs best (assessed by Quality of Outputs by Journals Ranking) is taken; the table shows up to 30 fields.

**Evaluation of the Research and Professional Activities of the Institutes of the Czech Academy of Sciences for 2010–2014**
**RESULTS OF THE PHASE I. AND BIBLIOMETRIC PARAMETERS**

| | |
|---|---|
| **Institute:** | Institute of Information Theory and Automation of the CAS, v. v. i. |
| **Team:** | Department of Control Theory |
| **Head:** | Prof. RNDr. Sergej Čelikovský, CSc. |

**Total number of outputs :** 88    **Evaluated outputs :** 16 (0)    **Outputs for bibliometry :** 27    **Large collaborations outputs:** 0
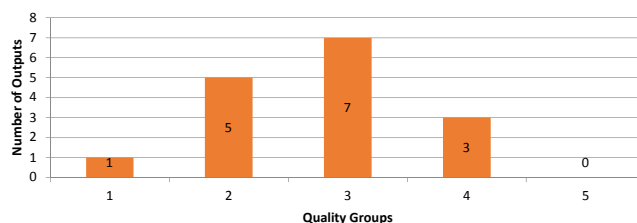
### Quality Groups of Outputs (Results of the Phase I.)

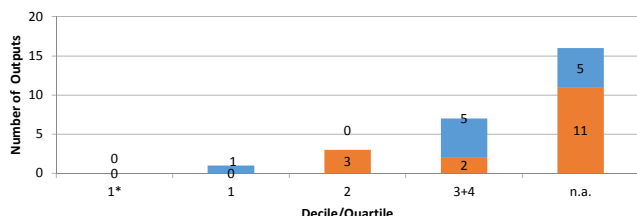| Quality | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|
| Outputs | 1 | 5 | 7 | 3 | 0 |

**Quality Groups:**
**(1)**: Quality that is **world-leading** in terms of originality, significance and rigour.
**(2)**: Quality that is **internationally excellent** in terms of originality, significance and rigour but which falls short of the highest standards of excellence.
**(3)**: Quality that is **recognized internationally** in terms of originality, significance and rigour.
**(4)**: Quality that is **recognized nationally** in terms of originality, significance and rigour.
**(5)**: Quality that falls **below the standard** of nationally recognized work. Or work which does not meet the published definition of research for the purposes of this assessment.
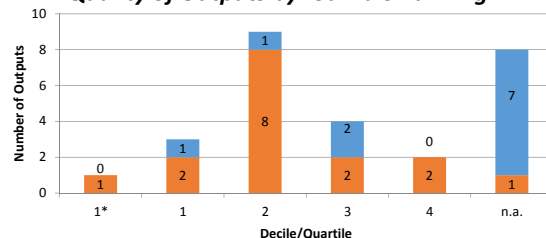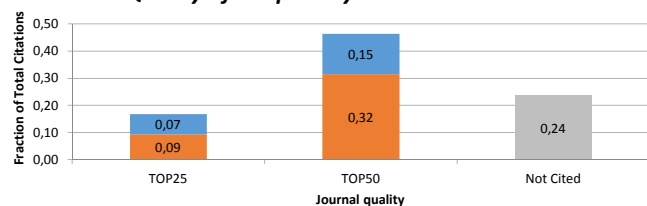

Quality Profile


Quality of Outputs by Number of Citations


Quality of Outputs by Journals Ranking


Quality of Outputs by Citation Sources

| Field Structure of Outputs | Outputs |
|---|---|
| AUTOMATION & CONTROL SYSTEMS | 8 |
| ENGINEERING, MULTIDISCIPLINARY | 4 |
| MULTIDISCIPLINARY SCIENCES | 3 |
| COMPUTER SCIENCE, ARTIFICIAL INTELLIGENCE | 2 |
| MATHEMATICS, APPLIED | 1 |
| ENGINEERING, MECHANICAL | 1 |
| COMPUTER SCIENCE, CYBERNETICS | 1 |
| INSTRUMENTS & INSTRUMENTATION | 1 |
| COMPUTER SCIENCE, INTERDISCIPLINARY APPLICATIONS | 1 |
| MEDICAL LABORATORY TECHNOLOGY | 1 |
| ENGINEERING, ELECTRICAL & ELECTRONIC | 1 |
| BIOCHEMICAL RESEARCH METHODS | 1 |
| PHYSICS, APPLIED | 1 |
| ENGINEERING, CHEMICAL | 1 |

**Total number of outputs:** selected types of outputs published in 2010-2014 and registered in the institutional research information system: journal article, monograph, monograph chapter, proceedings paper, patent, utility model, industrial design, prototype, functional specimen, norms and directives, specialized map, realized certified methodology, software, pilot plant, verified technology, plant breed/variety.

**Evaluated outputs:** outputs submitted by the team and evaluated in the Phase I (value in the brackets shows number of outputs submitted by the team but not evaluated in the Phase I).

**Outputs for bibliometry**: publications in 2010-2014 with less than 30 authors registered in the Web of Science; document type: article, review or proceedings paper.

**Large collaborations outputs:** publications in 2010-2014 with more than 30 authors registered in the Web of Science; document type: article, review or proceedings paper.

**Quality Profile**: number of evaluated outputs vs quality groups (5 groups); 'world-leading' quality denotes an absolute standard of quality in each field and subfield; 'world leading', 'internationally' and 'nationally' in this context refer to quality standards; they do not refer to the nature or geographical scope of particular subjects, nor to the focus of research nor its place of dissemination; for example, research which is focused on the subject specific to the Czech Republic might be of 'world leading' standard, on the contrary, work with an international focus might not be of 'world leading, internationally excellent or internationally recognized' standard.

**Quality of Outputs by Journals Ranking**: number of outputs in top decile (1*) and quartiles (1-4) by AIS of journals; n. a. - outputs in journals without AIS; if the output is assigned to more than one field, the mean value of quartile is taken (values from 0,1 to 0,5 rounded down); orange: outputs submitted by the team to the Evaluation, blue: other outputs by the team.

**Quality of Outputs by Number of Citations:** number of outputs in the top decile (1*) and in quartiles (1, 2, 3+4) of the list of outputs ordered by the number of citations; n. a. - the number of outputs in the field is low and/or the number of citations is not sufficient for relevant judgement; if the output is assigned to more than one field, the mean value of quartile is taken (values from 0,1 to 0,5 rounded down); orange: outputs submitted by the team to the Evaluation, blue: other outputs by the team.

**Quality of Outputs by Citation Sources:** fraction of citations of all outputs in the top quartile (TOP25) or the top half (TOP50) of list of journals ordered by AIS; fraction of "not cited" outputs is added; orange: outputs submitted by the team to the Evaluation, blue: other outputs by the team.

**Field Structure of Outputs:** number of outputs of the team in different fields; if the output is assigned to more than one field, the field where the publication performs best (assessed by Quality of Outputs by Journals Ranking) is taken; the table shows up to 30 fields.

**Evaluation of the Research and Professional Activities of the Institutes of the Czech Academy of Sciences for 2010–2014**
**RESULTS OF THE PHASE I. AND BIBLIOMETRIC PARAMETERS**

| | |
|---|---|
| **Institute:** | Institute of Information Theory and Automation of the CAS, v. v. i. |
| **Team:** | Department of Decision Making Theory |
| **Head:** | Doc. RNDr. Martin Kružík, Ph.D. |

**Total number of outputs :** 143 **Evaluated outputs :** 21 (0) **Outputs for bibliometry :** 83 **Large collaborations outputs:** 0
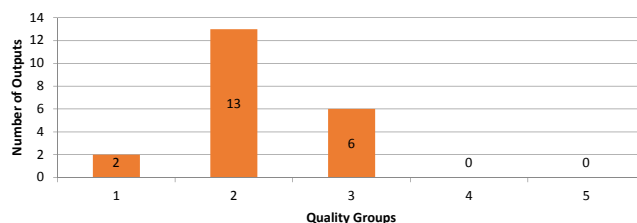
## Quality Groups of Outputs (Results of the Phase I.)

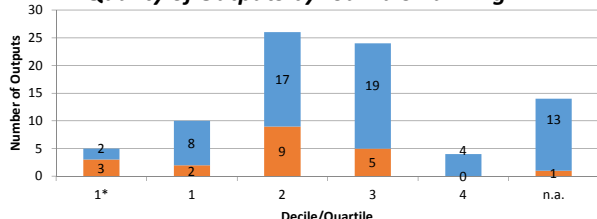| Quality | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|
| Outputs | 2 | 13 | 6 | 0 | 0 |

**Quality Groups:**
**(1)**: Quality that is **world-leading** in terms of originality, significance and rigour.
**(2)**: Quality that is **internationally excellent** in terms of originality, significance and rigour but which falls short of the highest standards of excellence.
**(3)**: Quality that is **recognized internationally** in terms of originality, significance and rigour.
**(4)**: Quality that is **recognized nationally** in terms of originality, significance and rigour.
**(5)**: Quality that falls **below the standard** of nationally recognized work. Or work which does not meet the published definition of research for the purposes of this assessment.
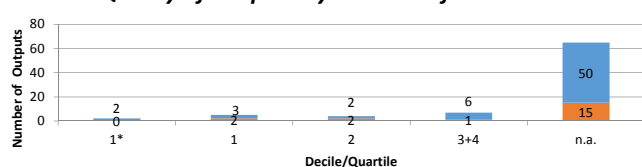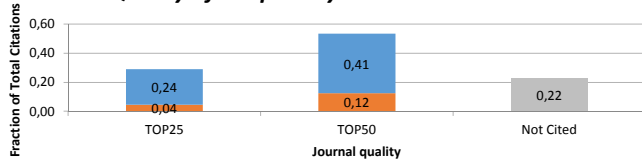
### Quality Profile



### Quality of Outputs by Journals Ranking



### Quality of Outputs by Number of Citations



### Quality of Outputs by Citation Sources



### Field Structure of Outputs

| Field Structure of Outputs | Outputs |
|---|---|
| COMPUTER SCIENCE, ARTIFICIAL INTELLIGENCE | 19 |
| MATHEMATICS, APPLIED | 19 |
| COMPUTER SCIENCE, CYBERNETICS | 11 |
| MATHEMATICS | 8 |
| AUTOMATION & CONTROL SYSTEMS | 5 |
| COMPUTER SCIENCE, THEORY & METHODS | 5 |
| MECHANICS | 2 |
| COMPUTER SCIENCE, SOFTWARE ENGINEERING | 2 |
| ENGINEERING, MULTIDISCIPLINARY | 2 |
| COMPUTER SCIENCE, INFORMATION SYSTEMS | 1 |
| METALLURGY & METALLURGICAL ENGINEERING | 1 |
| PHYSICS, MULTIDISCIPLINARY | 1 |
| ENGINEERING, ELECTRICAL & ELECTRONIC | 1 |
| OPERATIONS RESEARCH & MANAGEMENT SCIENCE | 1 |
| PHYSICS, MATHEMATICAL | 1 |
| MATHEMATICS, INTERDISCIPLINARY APPLICATIONS | 1 |
| STATISTICS & PROBABILITY | 1 |
| LOGIC | 1 |
| MATERIALS SCIENCE, MULTIDISCIPLINARY | 1 |

**Total number of outputs:** selected types of outputs published in 2010-2014 and registered in the institutional research information system: journal article, monograph, monograph chapter, proceedings paper, patent, utility model, industrial design, prototype, functional specimen, norms and directives, specialized map, realized certified methodology, software, pilot plant, verified technology, plant breed/variety.

**Evaluated outputs:** outputs submitted by the team and evaluated in the Phase I (value in the brackets shows number of outputs submitted by the team but not evaluated in the Phase I).

**Outputs for bibliometry**: publications in 2010-2014 with less than 30 authors registered in the Web of Science; document type: article, review or proceedings paper.

**Large collaborations outputs:** publications in 2010-2014 with more than 30 authors registered in the Web of Science; document type: article, review or proceedings paper.

**Quality Profile**: number of evaluated outputs vs quality groups (5 groups); 'world-leading' quality denotes an absolute standard of quality in each field and subfield; 'world leading', 'internationally' and 'nationally' in this context refer to quality standards; they do not refer to the nature or geographical scope of particular subjects, nor to the focus of research nor its place of dissemination; for example, research which is focused on the subject specific to the Czech Republic might be of 'world leading' standard, on the contrary, work with an international focus might not be of 'world leading, internationally excellent or internationally recognized' standard.

**Quality of Outputs by Journals Ranking**: number of outputs in top decile (1*) and quartiles (1-4) by AIS of journals; n. a. - outputs in journals without AIS; if the output is assigned to more than one field, the mean value of quartile is taken (values from 0,1 to 0,5 rounded down); orange: outputs submitted by the team to the Evaluation, blue: other outputs by the team.

**Quality of Outputs by Number of Citations:** number of outputs in the top decile (1*) and in quartiles (1, 2, 3+4) of the list of outputs ordered by the number of citations; n. a. - the number of outputs in the field is low and/or the number of citations is not sufficient for relevant judgement; if the output is assigned to more than one field, the mean value of quartile is taken (values from 0,1 to 0,5 rounded down); orange: outputs submitted by the team to the Evaluation, blue: other outputs by the team.

**Quality of Outputs by Citation Sources:** fraction of citations of all outputs in the top quartile (TOP25) or the top half (TOP50) of list of journals ordered by AIS; fraction of "not cited" outputs is added; orange: outputs submitted by the team to the Evaluation, blue: other outputs by the team.

**Field Structure of Outputs:** number of outputs of the team in different fields; if the output is assigned to more than one field, the field where the publication performs best (assessed by Quality of Outputs by Journals Ranking) is taken; the table shows up to 30 fields.

**Evaluation of the Research and Professional Activities of the Institutes of the Czech Academy of Sciences for 2010–2014**
**RESULTS OF THE PHASE I. AND BIBLIOMETRIC PARAMETERS**

| | |
|---|---|
| **Institute:** | Institute of Information Theory and Automation of the CAS, v. v. i. |
| **Team:** | Department of Econometrics |
| **Head:** | Prof. Ing. Miloslav Vošvrda, CSc. |

**Total number of outputs :** 198    **Evaluated outputs :** 16 (0)    **Outputs for bibliometry :** 114    **Large collaborations outputs:** 0
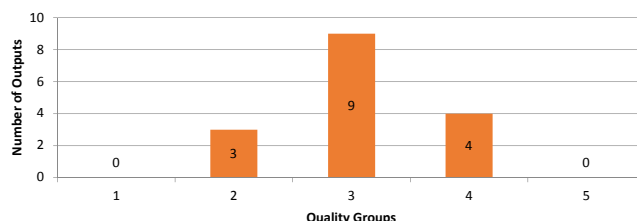
## *Quality Groups of Outputs (Results of the Phase I.)*

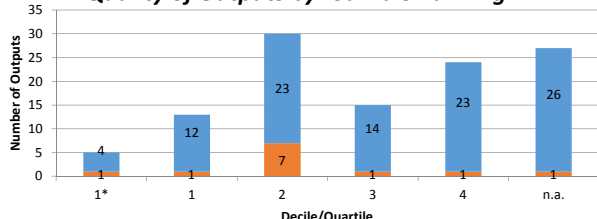| Quality | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|
| Outputs | 0 | 3 | 9 | 4 | 0 |

**Quality Groups:**
**(1)**: Quality that is **world-leading** in terms of originality, significance and rigour.
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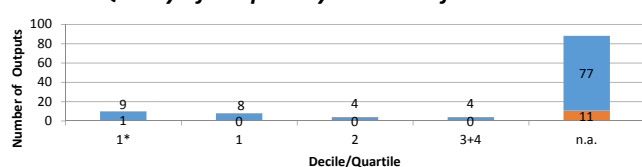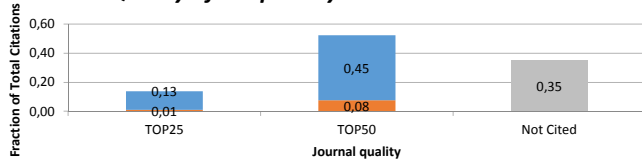


*Quality Profile*



*Quality of Outputs by Journals Ranking*

| Field Structure of Outputs | Outputs |
|---|---|
| ECONOMICS | 34 |
| PHYSICS, MULTIDISCIPLINARY | 13 |
| BUSINESS, FINANCE | 11 |
| COMPUTER SCIENCE, CYBERNETICS | 10 |
| COMPUTER SCIENCE, INFORMATION SYSTEMS | 10 |
| COMPUTER SCIENCE, ARTIFICIAL INTELLIGENCE | 7 |
| MATHEMATICS, APPLIED | 6 |
| MATHEMATICS | 4 |
| MULTIDISCIPLINARY SCIENCES | 4 |
| PHYSICS, CONDENSED MATTER | 3 |
| STATISTICS & PROBABILITY | 3 |
| COMPUTER SCIENCE, THEORY & METHODS | 3 |
| BIOTECHNOLOGY & APPLIED MICROBIOLOGY | 1 |
| PHYSICS, FLUIDS & PLASMAS | 1 |
| ANTHROPOLOGY | 1 |
| SURGERY | 1 |
| AGRICULTURAL ECONOMICS & POLICY | 1 |
| ENGINEERING, ELECTRICAL & ELECTRONIC | 1 |



*Quality of Outputs by Number of Citations*



*Quality of Outputs by Citation Sources*

**Total number of outputs:** selected types of outputs published in 2010-2014 and registered in the institutional research information system: journal article, monograph, monograph chapter, proceedings paper, patent, utility model, industrial design, prototype, functional specimen, norms and directives, specialized map, realized certified methodology, software, pilot plant, verified technology, plant breed/variety.

**Evaluated outputs:** outputs submitted by the team and evaluated in the Phase I (value in the brackets shows number of outputs submitted by the team but not evaluated in the Phase I).

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**Large collaborations outputs:** publications in 2010-2014 with more than 30 authors registered in the Web of Science; document type: article, review or proceedings paper.

**Quality Profile**: number of evaluated outputs vs quality groups (5 groups); 'world-leading' quality denotes an absolute standard of quality in each field and subfield; 'world leading', 'internationally' and 'nationally' in this context refer to quality standards; they do not refer to the nature or geographical scope of particular subjects, nor to the focus of research nor its place of dissemination; for example, research which is focused on the subject specific to the Czech Republic might be of 'world leading' standard, on the contrary, work with an international focus might not be of 'world leading, internationally excellent or internationally recognized' standard.

**Quality of Outputs by Journals Ranking**: number of outputs in top decile (1*) and quartiles (1-4) by AIS of journals; n. a. - outputs in journals without AIS; if the output is assigned to more than one field, the mean value of quartile is taken (values from 0,1 to 0,5 rounded down); orange: outputs submitted by the team to the Evaluation, blue: other outputs by the team.

**Quality of Outputs by Number of Citations:** number of outputs in the top decile (1*) and in quartiles (1, 2, 3+4) of the list of outputs ordered by the number of citations; n. a. - the number of outputs in the field is low and/or the number of citations is not sufficient for relevant judgement; if the output is assigned to more than one field, the mean value of quartile is taken (values from 0,1 to 0,5 rounded down); orange: outputs submitted by the team to the Evaluation, blue: other outputs by the team.

**Quality of Outputs by Citation Sources:** fraction of citations of all outputs in the top quartile (TOP25) or the top half (TOP50) of list of journals ordered by AIS; fraction of "not cited" outputs is added; orange: outputs submitted by the team to the Evaluation, blue: other outputs by the team.

**Field Structure of Outputs:** number of outputs of the team in different fields; if the output is assigned to more than one field, the field where the publication performs best (assessed by Quality of Outputs by Journals Ranking) is taken; the table shows up to 30 fields.

**Evaluation of the Research and Professional Activities of the Institutes of the Czech Academy of Sciences for 2010–2014**
**RESULTS OF THE PHASE I. AND BIBLIOMETRIC PARAMETERS**

| | |
|---|---|
| **Institute:** | Institute of Information Theory and Automation of the CAS, v. v. i. |
| **Team:** | Department of Image Processing |
| **Head:** | RNDr. Barbara Zitová, Ph.D. |

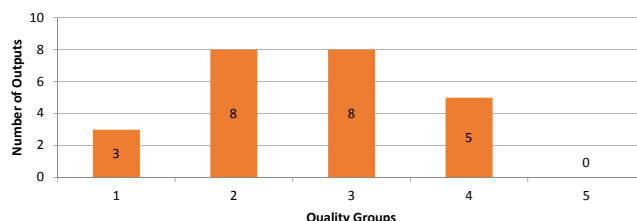| **Total number of outputs :** 145 | **Evaluated outputs :** 24 (0) | **Outputs for bibliometry :** 52 | **Large collaborations outputs:** 0 |
|---|---|---|---|

### Quality Groups of Outputs (Results of the Phase I.)

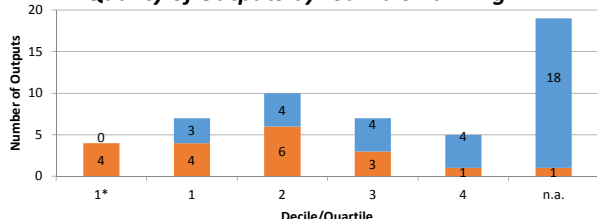| Quality | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|
| Outputs | 3 | 8 | 8 | 5 | 0 |

**Quality Groups:**
**(1)**: Quality that is **world-leading** in terms of originality, significance and rigour.
**(2)**: Quality that is **internationally excellent** in terms of originality, significance and rigour but which falls short of the highest standards of excellence.
**(3)**: Quality that is **recognized internationally** in terms of originality, significance and rigour.
**(4)**: Quality that is **recognized nationally** in terms of originality, significance and rigour.
**(5)**: Quality that falls **below the standard** of nationally recognized work. Or work which does not meet the published definition of research for the purposes of this assessment.
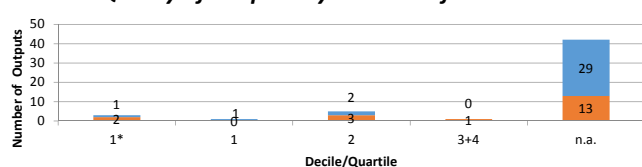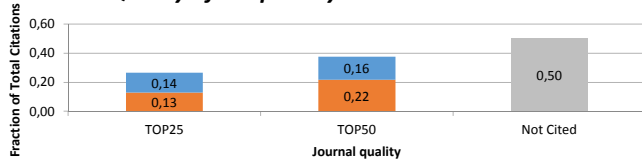

*Quality Profile*


*Quality of Outputs by Journals Ranking*


*Quality of Outputs by Number of Citations*


*Quality of Outputs by Citation Sources*

| Field Structure of Outputs | Outputs |
|---|---|
| COMPUTER SCIENCE, ARTIFICIAL INTELLIGENCE | 13 |
| ENGINEERING, ELECTRICAL & ELECTRONIC | 7 |
| OPTICS | 5 |
| ENGINEERING, BIOMEDICAL | 3 |
| COMPUTER SCIENCE, INFORMATION SYSTEMS | 2 |
| COMPUTER SCIENCE, INTERDISCIPLINARY APPLICATIONS | 2 |
| ASTRONOMY & ASTROPHYSICS | 2 |
| AUTOMATION & CONTROL SYSTEMS | 2 |
| AGRICULTURE, MULTIDISCIPLINARY | 2 |
| COMPUTER SCIENCE, CYBERNETICS | 2 |
| COMPUTER SCIENCE, THEORY & METHODS | 2 |
| NANOSCIENCE & NANOTECHNOLOGY | 1 |
| MEDICAL INFORMATICS | 1 |
| RADIOLOGY, NUCLEAR MEDICINE & MEDICAL IMAGING | 1 |
| ART | 1 |
| MULTIDISCIPLINARY SCIENCES | 1 |
| COMPUTER SCIENCE, HARDWARE & ARCHITECTURE | 1 |
| ACOUSTICS | 1 |
| CHEMISTRY, MULTIDISCIPLINARY | 1 |
| ENGINEERING, AEROSPACE | 1 |
| IMAGING SCIENCE & PHOTOGRAPHIC TECHNOLOGY | 1 |

**Total number of outputs:** selected types of outputs published in 2010-2014 and registered in the institutional research information system:  journal article, monograph, monograph chapter, proceedings paper, patent, utility model, industrial design, prototype, functional specimen,  norms and directives, specialized map, realized certified methodology, software, pilot plant, verified technology, plant breed/variety.

**Evaluated outputs:** outputs submitted by the team and evaluated in the Phase I (value in the brackets shows number of outputs submitted by the team but not evaluated in the Phase I).

**Outputs for bibliometry**: publications in 2010-2014 with less than 30 authors registered in the Web of Science; document type: article, review or proceedings paper.

**Large collaborations outputs:** publications in 2010-2014 with more than 30 authors registered in the Web of Science; document type: article, review or proceedings paper.

**Quality Profile**: number of evaluated outputs vs quality groups (5 groups); 'world-leading' quality denotes an absolute standard of quality in each field and subfield; 'world leading', 'internationally' and 'nationally' in this context refer to quality standards; they do not refer to the nature or geographical scope of particular subjects, nor to the focus of research nor its place of dissemination; for example, research which is focused on the subject specific to the Czech Republic might be of 'world leading' standard, on the contrary, work with an international focus might not be of 'world leading, internationally excellent or internationally recognized' standard.

**Quality of Outputs by Journals Ranking**: number of outputs in top decile (1*) and quartiles (1-4) by AIS of journals; n. a. - outputs in journals without AIS; if the output is assigned to more than one field, the mean value of quartile is taken (values from 0,1 to 0,5 rounded down); orange: outputs submitted by the team to the Evaluation, blue: other outputs by the team.

**Quality of Outputs by Number of Citations:** number of outputs in the top decile (1*) and in quartiles (1, 2, 3+4) of the list of outputs ordered by the number of citations; n. a. - the number of outputs in the field is low and/or the number of citations is not sufficient for relevant judgement; if the output is assigned to more than one field, the mean value of quartile is taken (values from 0,1 to 0,5 rounded down); orange: outputs submitted by the team to the Evaluation, blue: other outputs by the team.

**Quality of Outputs by Citation Sources:** fraction of citations of all outputs in the top quartile (TOP25) or the top half (TOP50) of list of journals ordered by AIS; fraction of "not cited" outputs is added; orange: outputs submitted by the team to the Evaluation, blue: other outputs by the team.

**Field Structure of Outputs:** number of outputs of the team in different fields; if the output is assigned to more than one field, the field where the publication performs best (assessed by Quality of Outputs by Journals Ranking) is taken; the table shows up to 30 fields.

**Evaluation of the Research and Professional Activities of the Institutes of the Czech Academy of Sciences for 2010–2014**
**RESULTS OF THE PHASE I. AND BIBLIOMETRIC PARAMETERS**

| | |
|---|---|
| **Institute:** | Institute of Information Theory and Automation of the CAS, v. v. i. |
| **Team:** | Department of Pattern Recognition |
| **Head:** | Prof. Ing. Michal Haindl, DrSc. |

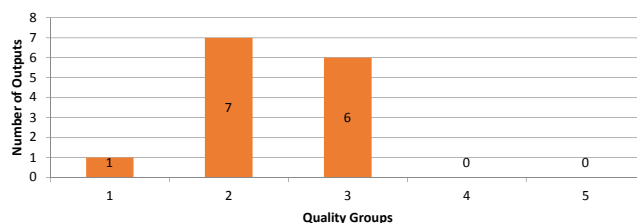| | | | | |
|---|---|---|---|---|
| **Total number of outputs :** 80 | **Evaluated outputs :** 14 (0) | **Outputs for bibliometry :** 21 | **Large collaborations outputs:** 0 |

## Quality Groups of Outputs (Results of the Phase I.)

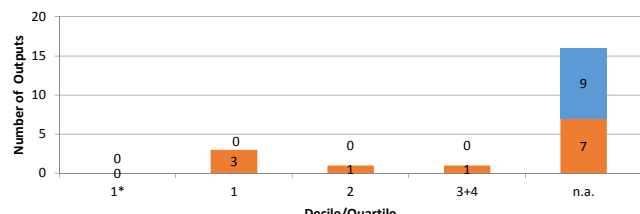| Quality | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|
| Outputs | 1 | 7 | 6 | 0 | 0 |

**Quality Groups:**
**(1)**: Quality that is **world-leading** in terms of originality, significance and rigour.
**(2)**: Quality that is **internationally excellent** in terms of originality, significance and rigour but which falls short of the highest standards of excellence.
**(3)**: Quality that is **recognized internationally** in terms of originality, significance and rigour.
**(4)**: Quality that is **recognized nationally** in terms of originality, significance and rigour.
**(5)**: Quality that falls **below the standard** of nationally recognized work. Or work which does not meet the published definition of research for the purposes of this assessment.
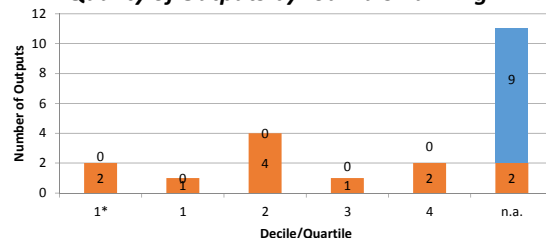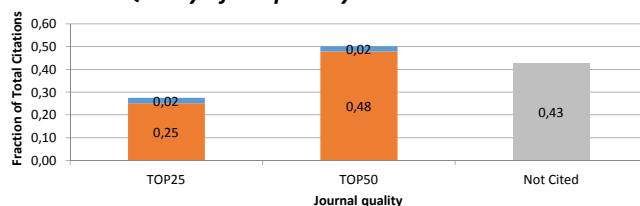
### Quality Profile


### Quality of Outputs by Number of Citations


### Quality of Outputs by Journals Ranking


### Quality of Outputs by Citation Sources


| Field Structure of Outputs | Outputs |
|---|---|
| COMPUTER SCIENCE, ARTIFICIAL INTELLIGENCE | 10 |
| COMPUTER SCIENCE, CYBERNETICS | 2 |
| COMPUTER SCIENCE, SOFTWARE ENGINEERING | 2 |
| COMPUTER SCIENCE, INFORMATION SYSTEMS | 1 |
| MATHEMATICS, APPLIED | 1 |
| MATHEMATICAL & COMPUTATIONAL BIOLOGY | 1 |
| ASTRONOMY & ASTROPHYSICS | 1 |
| SOCIAL SCIENCES, MATHEMATICAL METHODS | 1 |
| ELECTROCHEMISTRY | 1 |
| IMAGING SCIENCE & PHOTOGRAPHIC TECHNOLOGY | 1 |

**Total number of outputs:** selected types of outputs published in 2010-2014 and registered in the institutional research information system: journal article, monograph, monograph chapter, proceedings paper, patent, utility model, industrial design, prototype, functional specimen, norms and directives, specialized map, realized certified methodology, software, pilot plant, verified technology, plant breed/variety.

**Evaluated outputs:** outputs submitted by the team and evaluated in the Phase I (value in the brackets shows number of outputs submitted by the team but not evaluated in the Phase I).

**Outputs for bibliometry**: publications in 2010-2014 with less than 30 authors registered in the Web of Science; document type: article, review or proceedings paper.

**Large collaborations outputs:** publications in 2010-2014 with more than 30 authors registered in the Web of Science; document type: article, review or proceedings paper.

**Quality Profile**: number of evaluated outputs vs quality groups (5 groups); 'world-leading' quality denotes an absolute standard of quality in each field and subfield; 'world leading', 'internationally' and 'nationally' in this context refer to quality standards; they do not refer to the nature or geographical scope of particular subjects, nor to the focus of research nor its place of dissemination; for example, research which is focused on the subject specific to the Czech Republic might be of 'world leading' standard, on the contrary, work with an international focus might not be of 'world leading, internationally excellent or internationally recognized' standard.

**Quality of Outputs by Journals Ranking**: number of outputs in top decile (1*) and quartiles (1-4) by AIS of journals; n. a. - outputs in journals without AIS; if the output is assigned to more than one field, the mean value of quartile is taken (values from 0,1 to 0,5 rounded down); orange: outputs submitted by the team to the Evaluation, blue: other outputs by the team.

**Quality of Outputs by Number of Citations:** number of outputs in the top decile (1*) and in quartiles (1, 2, 3+4) of the list of outputs ordered by the number of citations; n. a. - the number of outputs in the field is low and/or the number of citations is not sufficient for relevant judgement; if the output is assigned to more than one field, the mean value of quartile is taken (values from 0,1 to 0,5 rounded down); orange: outputs submitted by the team to the Evaluation, blue: other outputs by the team.

**Quality of Outputs by Citation Sources:** fraction of citations of all outputs in the top quartile (TOP25) or the top half (TOP50) of list of journals ordered by AIS; fraction of "not cited" outputs is added; orange: outputs submitted by the team to the Evaluation, blue: other outputs by the team.

**Field Structure of Outputs:** number of outputs of the team in different fields; if the output is assigned to more than one field, the field where the publication performs best (assessed by Quality of Outputs by Journals Ranking) is taken; the table shows up to 30 fields.

**Evaluation of the Research and Professional Activities of the Institutes of the Czech Academy of Sciences for 2010–2014**
**RESULTS OF THE PHASE I. AND BIBLIOMETRIC PARAMETERS**

| | |
|---|---|
| **Institute:** | Institute of Information Theory and Automation of the CAS, v. v. i. |
| **Team:** | Department of Signal Processing |
| **Head:** | Ing. Jiří Kadlec, CSc. |

| | | | | |
|---|---|---|---|---|
| **Total number of outputs :** 67 | **Evaluated outputs :** 10 (0) | **Outputs for bibliometry :** 5 | **Large collaborations outputs:** 0 |

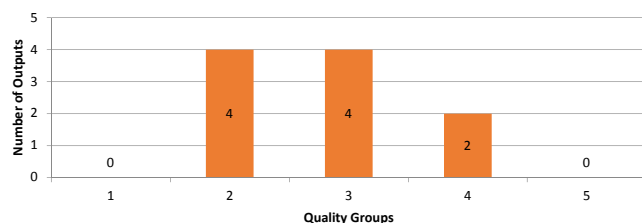## Quality Groups of Outputs (Results of the Phase I.)

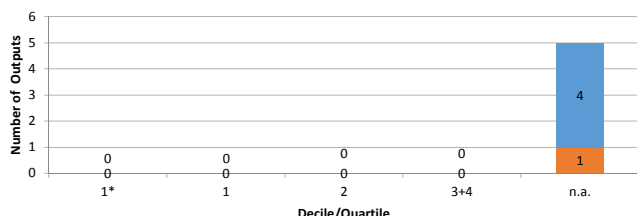| Quality | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|
| Outputs | 0 | 4 | 4 | 2 | 0 |

**Quality Groups:**
**(1)**: Quality that is **world-leading** in terms of originality, significance and rigour.
**(2)**: Quality that is **internationally excellent** in terms of originality, significance and rigour but which falls short of the highest standards of excellence.
**(3)**: Quality that is **recognized internationally** in terms of originality, significance and rigour.
**(4)**: Quality that is **recognized nationally** in terms of originality, significance and rigour.
**(5)**: Quality that falls **below the standard** of nationally recognized work. Or work which does not meet the published definition of research for the purposes of this assessment.
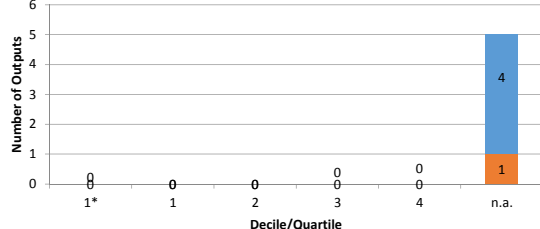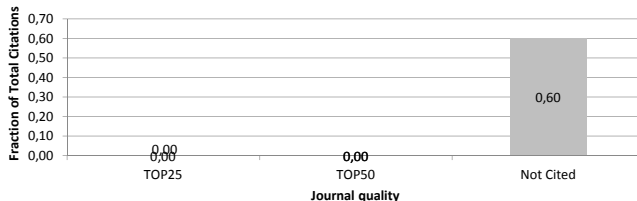


Quality Profile



Quality of Outputs by Number of Citations



Quality of Outputs by Journals Ranking



Quality of Outputs by Citation Sources

| Field Structure of Outputs | Outputs |
|---|---|
| ENGINEERING, ELECTRICAL & ELECTRONIC | 2 |
| COMPUTER SCIENCE, HARDWARE & ARCHITECTURE | 2 |
| ACOUSTICS | 1 |

**Total number of outputs:** selected types of outputs published in 2010-2014 and registered in the institutional research information system: journal article, monograph, monograph chapter, proceedings paper, patent, utility model, industrial design, prototype, functional specimen, norms and directives, specialized map, realized certified methodology, software, pilot plant, verified technology, plant breed/variety.

**Evaluated outputs:** outputs submitted by the team and evaluated in the Phase I (value in the brackets shows number of outputs submitted by the team but not evaluated in the Phase I).

**Outputs for bibliometry**: publications in 2010-2014 with less than 30 authors registered in the Web of Science; document type: article, review or proceedings paper.

**Large collaborations outputs:** publications in 2010-2014 with more than 30 authors registered in the Web of Science; document type: article, review or proceedings paper.

**Quality Profile**: number of evaluated outputs vs quality groups (5 groups); 'world-leading' quality denotes an absolute standard of quality in each field and subfield; 'world leading', 'internationally' and 'nationally' in this context refer to quality standards; they do not refer to the nature or geographical scope of particular subjects, nor to the focus of research nor its place of dissemination; for example, research which is focused on the subject specific to the Czech Republic might be of 'world leading' standard, on the contrary, work with an international focus might not be of 'world leading, internationally excellent or internationally recognized' standard.

**Quality of Outputs by Journals Ranking**: number of outputs in top decile (1*) and quartiles (1-4) by AIS of journals; n. a. - outputs in journals without AIS; if the output is assigned to more than one field, the mean value of quartile is taken (values from 0,1 to 0,5 rounded down); orange: outputs submitted by the team to the Evaluation, blue: other outputs by the team.

**Quality of Outputs by Number of Citations:** number of outputs in the top decile (1*) and in quartiles (1, 2, 3+4) of the list of outputs ordered by the number of citations; n. a. - the number of outputs in the field is low and/or the number of citations is not sufficient for relevant judgement; if the output is assigned to more than one field, the mean value of quartile is taken (values from 0,1 to 0,5 rounded down); orange: outputs submitted by the team to the Evaluation, blue: other outputs by the team.

**Quality of Outputs by Citation Sources:** fraction of citations of all outputs in the top quartile (TOP25) or the top half (TOP50) of list of journals ordered by AIS; fraction of "not cited" outputs is added; orange: outputs submitted by the team to the Evaluation, blue: other outputs by the team.

**Field Structure of Outputs:** number of outputs of the team in different fields; if the output is assigned to more than one field, the field where the publication performs best (assessed by Quality of Outputs by Journals Ranking) is taken; the table shows up to 30 fields.

**Evaluation of the Research and Professional Activities of the Institutes of the Czech Academy of Sciences for 2010–2014**
**RESULTS OF THE PHASE I. AND BIBLIOMETRIC PARAMETERS**

| | |
|---|---|
| **Institute:** | Institute of Information Theory and Automation of the CAS, v. v. i. |
| **Team:** | Department of Stochastic Informatics |
| **Head:** | RNDr. Jan Seidler, CSc. |

**Total number of outputs :** 122   **Evaluated outputs :** 25 (0)   **Outputs for bibliometry :** 57   **Large collaborations outputs:** 0
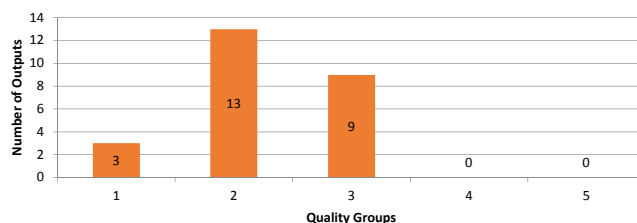
### Quality Groups of Outputs (Results of the Phase I.)

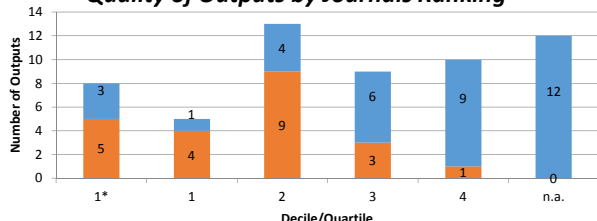| Quality | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|
| Outputs | 3 | 13 | 9 | 0 | 0 |

**Quality Groups:**
**(1)**: Quality that is **world-leading** in terms of originality, significance and rigour.
**(2)**: Quality that is **internationally excellent** in terms of originality, significance and rigour but which falls short of the highest standards of excellence.
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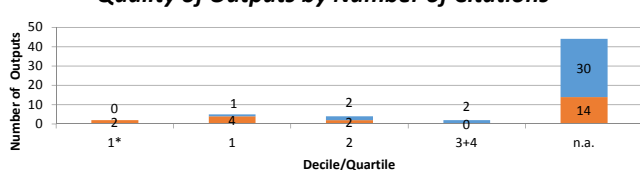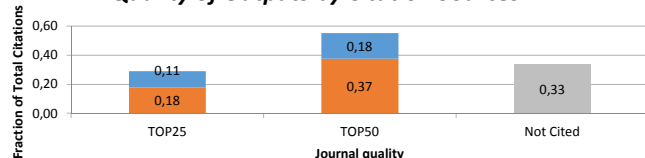

**Quality Profile**


**Quality of Outputs by Journals Ranking**

### Field Structure of Outputs

| Field Structure of Outputs | Outputs |
|---|---|
| STATISTICS & PROBABILITY | 19 |
| ENGINEERING, ELECTRICAL & ELECTRONIC | 9 |
| MATHEMATICS, APPLIED | 4 |
| MATHEMATICS | 4 |
| COMPUTER SCIENCE, CYBERNETICS | 4 |
| ACOUSTICS | 4 |
| ECONOMICS | 3 |
| PHYSICS, MATHEMATICAL | 2 |
| COMPUTER SCIENCE, ARTIFICIAL INTELLIGENCE | 2 |
| PUBLIC, ENVIRONMENTAL & OCCUPATIONAL HEALTH | 1 |
| COMPUTER SCIENCE, THEORY & METHODS | 1 |
| SOCIAL SCIENCES, MATHEMATICAL METHODS | 1 |
| PHYSICS, FLUIDS & PLASMAS | 1 |
| ENGINEERING, BIOMEDICAL | 1 |
| MANAGEMENT | 1 |


**Quality of Outputs by Number of Citations**


**Quality of Outputs by Citation Sources**

**Total number of outputs:** selected types of outputs published in 2010-2014 and registered in the institutional research information system: journal article, monograph, monograph chapter, proceedings paper, patent, utility model, industrial design, prototype, functional specimen, norms and directives, specialized map, realized certified methodology, software, pilot plant, verified technology, plant breed/variety.

**Evaluated outputs:** outputs submitted by the team and evaluated in the Phase I (value in the brackets shows number of outputs submitted by the team but not evaluated in the Phase I).

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**Large collaborations outputs:** publications in 2010-2014 with more than 30 authors registered in the Web of Science; document type: article, review or proceedings paper.

**Quality Profile**: number of evaluated outputs vs quality groups (5 groups); 'world-leading' quality denotes an absolute standard of quality in each field and subfield; 'world leading', 'internationally' and 'nationally' in this context refer to quality standards; they do not refer to the nature or geographical scope of particular subjects, nor to the focus of research nor its place of dissemination; for example, research which is focused on the subject specific to the Czech Republic might be of 'world leading' standard, on the contrary, work with an international focus might not be of 'world leading, internationally excellent or internationally recognized' standard.

**Quality of Outputs by Journals Ranking**: number of outputs in top decile (1*) and quartiles (1-4) by AIS of journals; n. a. - outputs in journals without AIS; if the output is assigned to more than one field, the mean value of quartile is taken (values from 0,1 to 0,5 rounded down); orange: outputs submitted by the team to the Evaluation, blue: other outputs by the team.

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