

INEX 2003 Workshop

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Dagstuhl

German Informatics Conference Center

- Lockers
- Meals
- Extras
- Library
- Computer Pools
- Internet connection

Outline

- Organisation
- Participation
- Topics
- Assessments
- Submissions and Pools
- Relevance Scale
- Relevance Judgment and Metrics
 - Comparison `inex_eval` ↔ `inex_eval_ng`
- Evaluation results
- Workshop Program

Organization

Organized By:

- University of Duisburg-Essen, Germany
 - Norbert Fuhr, Norbert Gövert and Saadia Malik
- Queen Mary University of London, UK
 - Mounia Lalmas and Gabriella Kazai

Supported By:

- IEEE Computer Society
- University of Duisburg-Essen

Participation

Groups registered	38
Groups who submitted Topics	23
Groups with submissions	24
Groups who did assessments	28
Groups at workshop	22

Topics

- **content-only (CO) topics**
only content-oriented conditions; no restriction to specific structural elements
- **content-and-structure (CAS) topics**
allow for query condition wrt. to structure of documents and retrieval result

Topics: CO

```
<inex_topic topic_id="96" query_type="CO" ct_no="18">
```

```
<title>+"software cost estimation"</title>
```

```
<description>Software cost estimation.</description>
```

```
<narrative>
```

```
To be relevant a document has to deal with methods or approaches concerning software cost estimation in the area of software development. Related approaches to software effort estimation are relevant if the applicability to cost estimation is mentioned in detail. General discussions on effort estimation are not relevant.
```

```
</narrative>
```

```
<keywords>software, cost, estimation</keywords>
```

```
</inex_topic>
```

Topics: CAS

```
<inex_topic topic_id="78" query_type="CAS" ct_no="87">
<title>//vt[about(.,'"Information Retrieval" student')] </title>
<description>Vitae of graduate students researching Information
Retrieval</description>
<narrative>Each vita should be about an author who was a graduate
student at the time of the article's publication. If a vt field has
multiple authors, the vt should be considered relevant if at least one
of the authors is a graduate student studying Information
Retrieval.</narrative>
<keywords>Information Retrieval, student, studies, studying,
researches, researching</keywords>
</inex_topic>
```

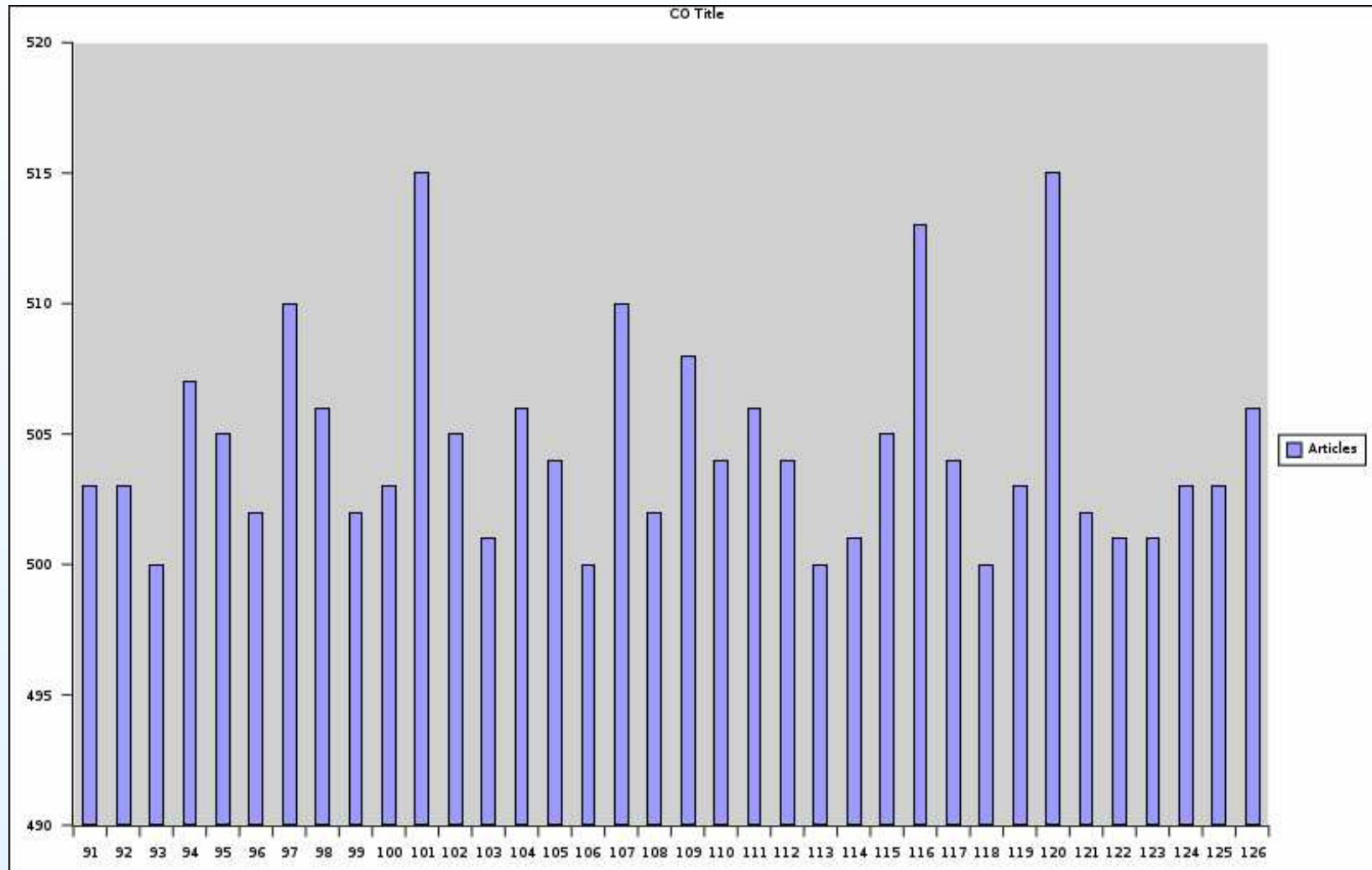
Topics and Assessments

Topics Submitted	122
CO Topics Submitted	65
CAS Topics Submitted	57
CO Topics Selected	35
CAS Topics Selected	30
Assessed CO Topics	30
Assessed CAS Topics	26

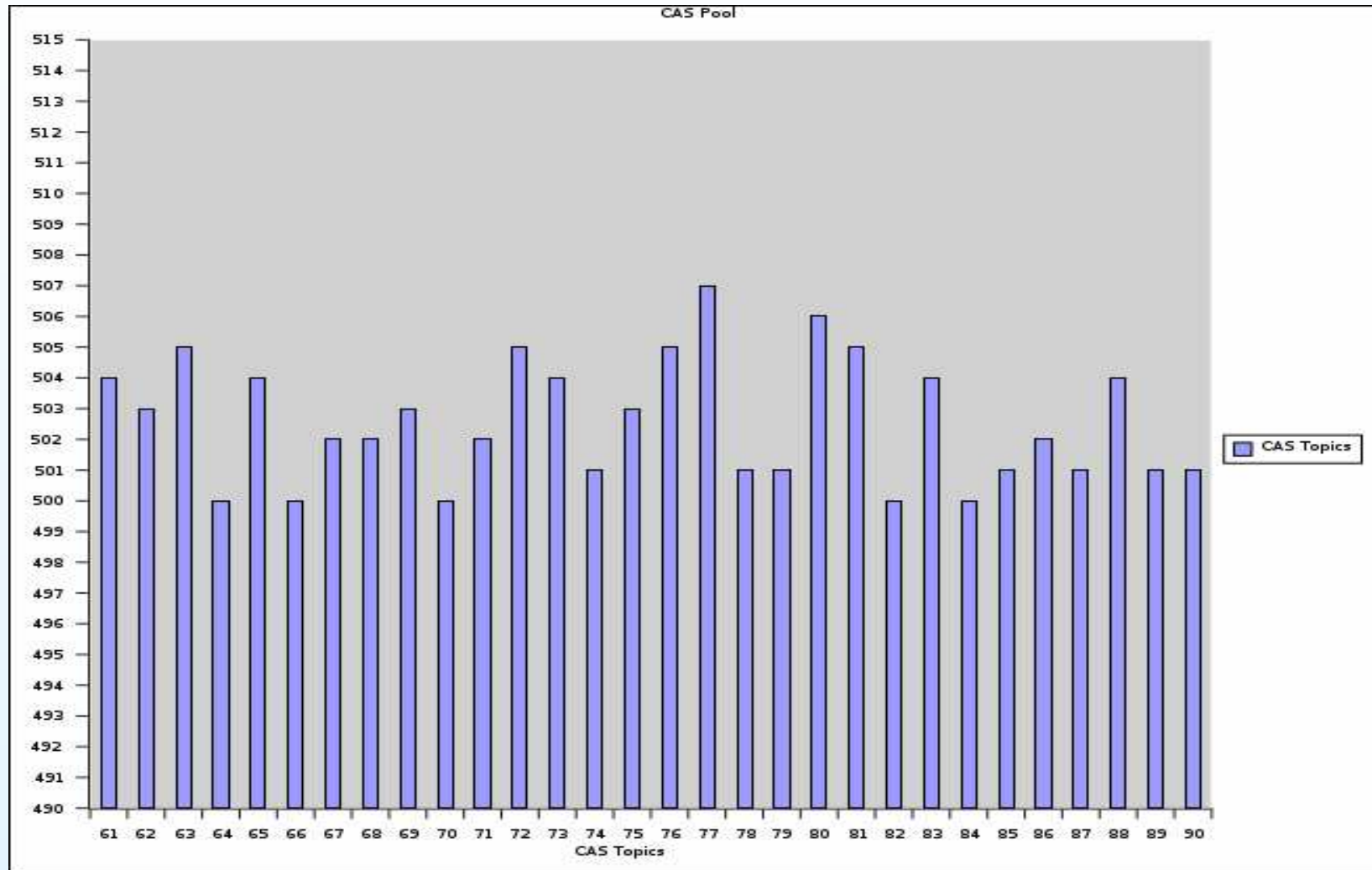
Tasks and Subtasks for Submissions

- content-only
- content-and-structure
 - **Strict content-and-structure(SCAS)**
All the structural conditions must be matched stricly.
 - **Vague content-and-structure(VCAS)**
Structural constraints are treated as vague conditions.

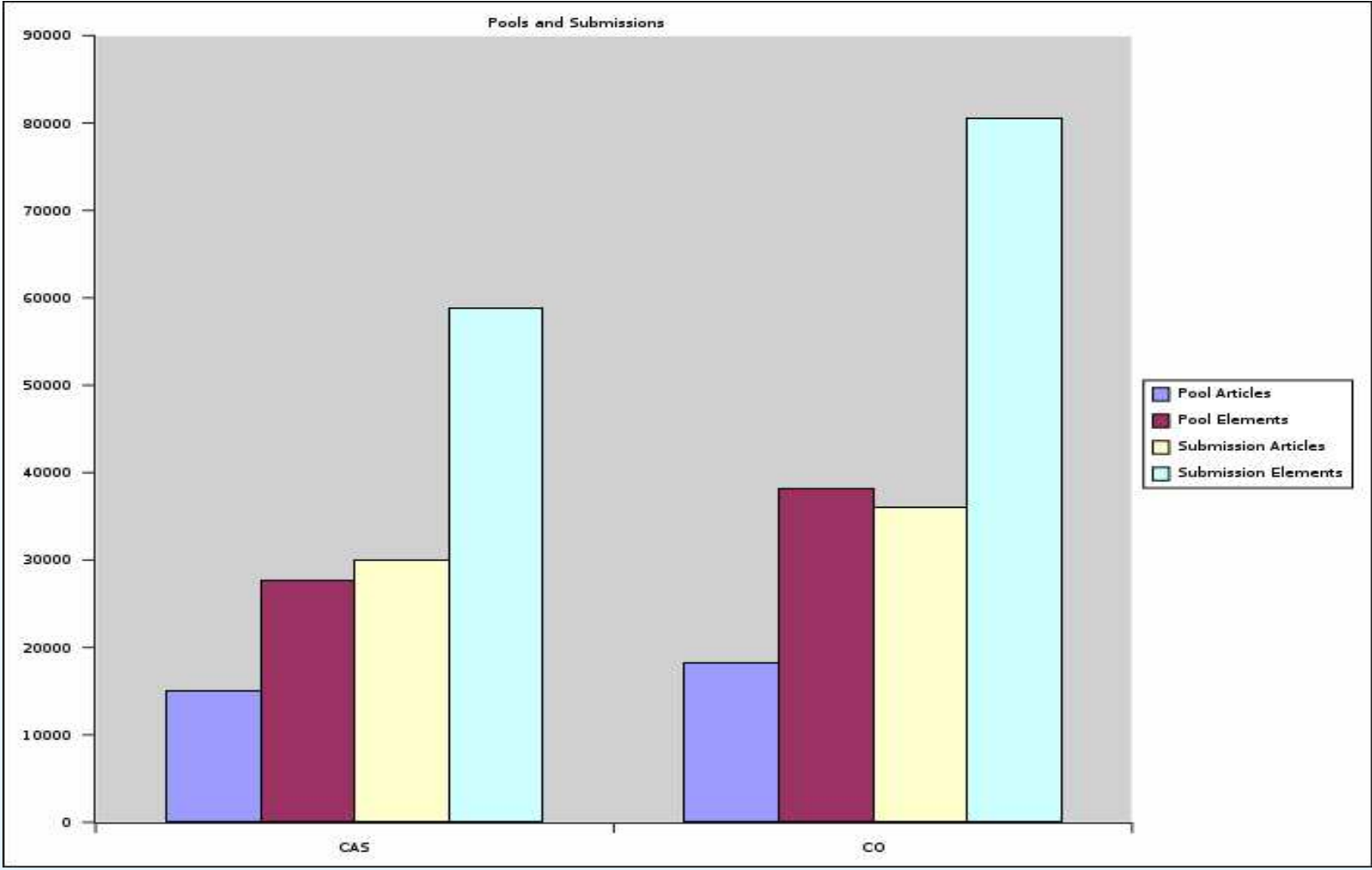
CO Pools



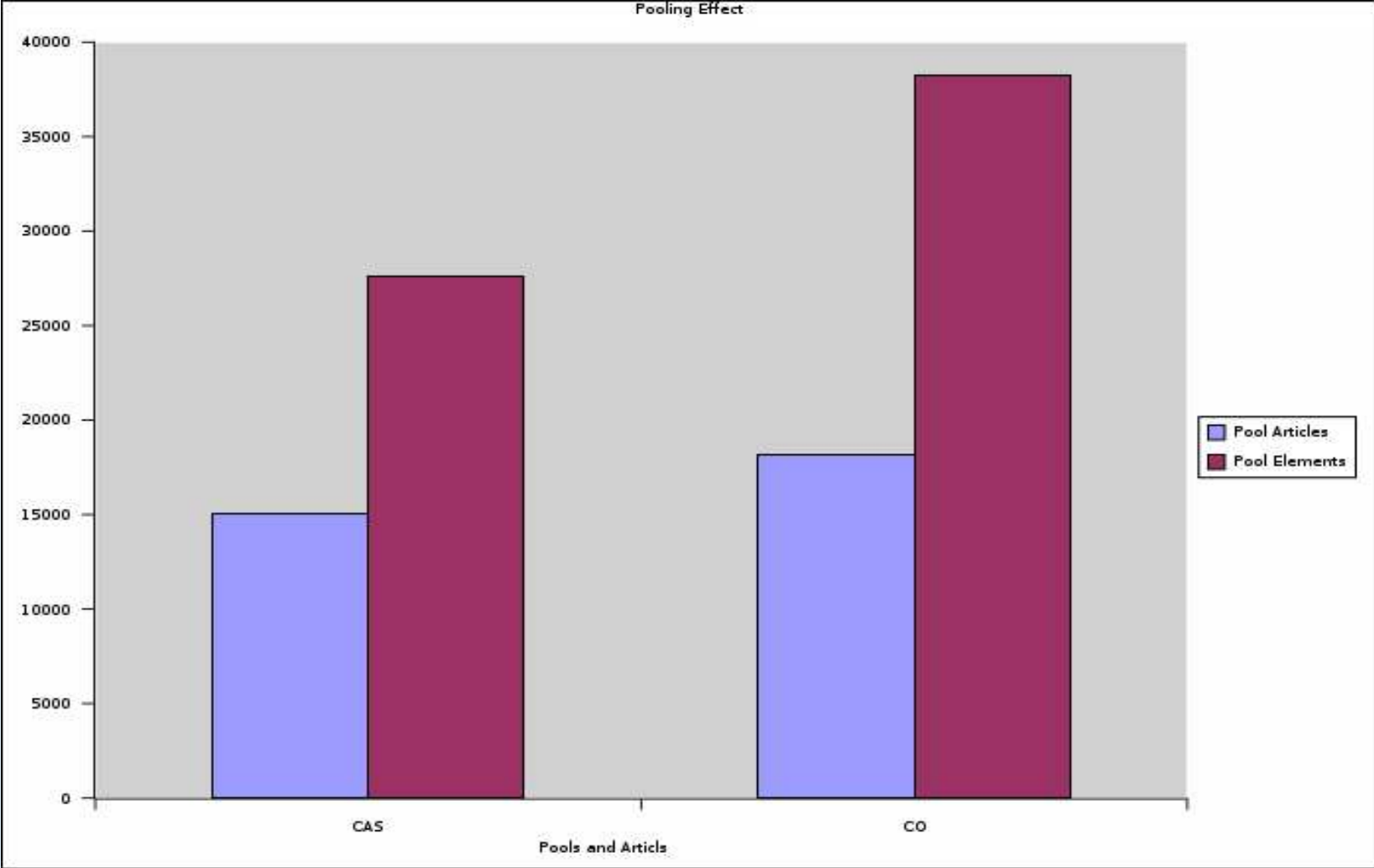
CAS Pools



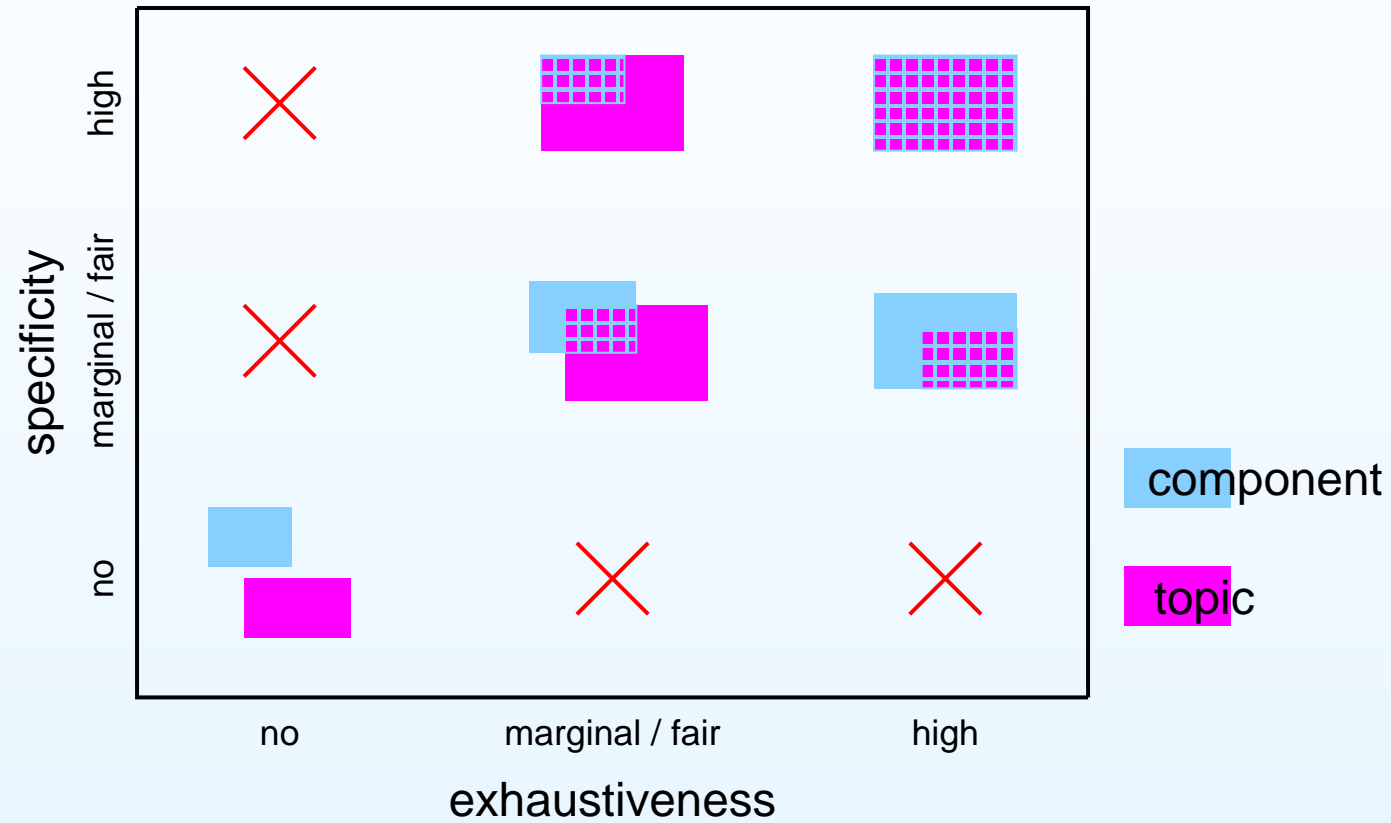
Pools & Submissions



Pooling Effect



Relevance Scale



Evaluation metrics for content-oriented XML retrieval

`inex_eval`

- strict, generalized quantisation of (*specificity, exhaustiveness*) pairs on single relevance value
- application of standard recall/precision metrics
- size, overlap not considered

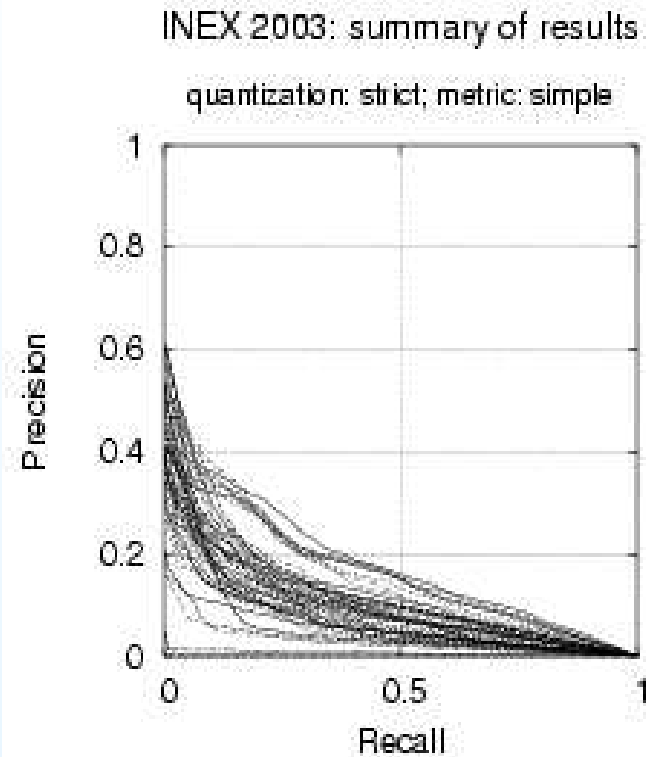
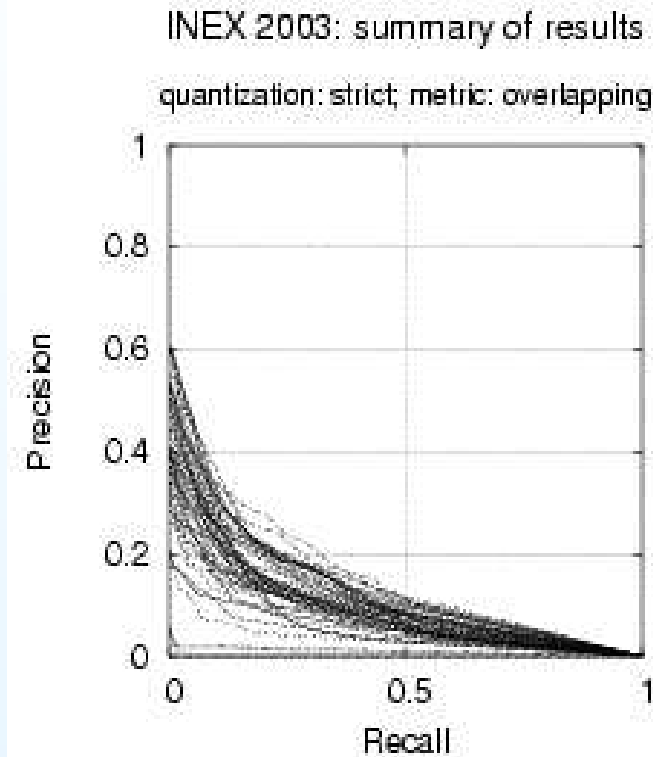
`inex_eval_ng`

- consideration of component size;
- consideration of overlaps of components within rankings;
- metric with theoretical foundation

Evaluation metrics for CAS XML retrieval

- SCAS
inex_eval
 - strict, generalized quantisation of (*specificity, exhaustiveness*) pairs on single relevance value
 - application of standard recall/precision metrics
 - size, overlap not considered
- VCAS:
under development

Evaluation Results for CO topics using `inex_eval_ng`



Workshop Program

- Paper Sessions with Presentations
- Discussion Section
 - On-line assessment tool, chaired by Benjamin Piwowarski
 - Relevance dimension, chaired by Jaana Kekalainen
 - Metrics, chaired by Gabriella Kazai
 - Topic format, chaired by Mounia Lalmas
 - Track proposals, chaired by Norbert Fuhr
 - INEX 2004

Acknowledgments

- Benjamin Piwowarski
- Jaana Kekalainen
- Gabriella Kazai
- Norbert Gövert
- Mounia Lalmas
- Saadia Malik

Participants: Geographic Distribution

USA	9	Europe	17
New Zealand	1	Denmark	1
Australia	2	Finland	2
Asia	9	France	3
China	2	Germany	4
Israel	2	Italy	2
Japan	1	Netherlands	2
Korea	2	Spain	1
Russia	1	Switzerland	1
Thailand	1	UK	1