












MATHMET

The European Centre for
Mathematics and Statistics in
Metrology



Rationale

- MATHMET is already an existing operational network for mathematics and statistics
- MATHMET goal is **to promote best practice in mathematics and statistics in metrology**
- Modern metrology requires expert knowledge and further advances in applied mathematics, statistics and numerical computation
- Need to support emerging fields such as large scale data analysis, digitalisation, sensor networks, medical imaging, ...
- Need for collaborative research between NMIs on mathematical and statistical methods for metrology
- Exploiting synergy between mathematical groups at the European level
- Strengthening links to academic community in mathematics & statistics, stakeholders in industry & regulation



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Activities and Actors




Activities :

- Organizing joint research projects between its members, e.g. dynamic measurements
- Organizing series of workshops : MATHMET and DYNAMIC
- Organizing scientific collaboration between its members : research projects, researchers mobility
- Organizing cooperation with NMIs overseas
- Dissemination of knowledge through its website


Actors :

- Full members, 1 NMI per country, currently 7 members : IPQ, IMbIH, INRIM, LNE, NPL, PTB, RISE
- Associated members : other NMI, DI, academia, industry
expressing the needs, consulting, collaboration




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Outputs




- **Website**, a unique reference point for general information about research activities in mathematical and statistical methods for metrology
- **Best practice guides** : inverse problems, conformity assessment,...
- **Software** : measurement uncertainty evaluation, computation of KCRV
- **Training materials**
- **Scientific projects**
- **Publication database**
- **Services**, including evaluation of MU for industrial measurements
- **Workshops**



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Impact




- Harmonized way for delivering measurement uncertainty
- Visibility for metrology in scientific communities, such as, statistics, applied mathematics, signal processing, computational science,...
- MATHMET provides technical solutions to address emerging challenges in fields like health, environment protection and the manufacture of quality products

Referring link: <https://mathmet.org>

In 2017, over 10 000 views per month




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