

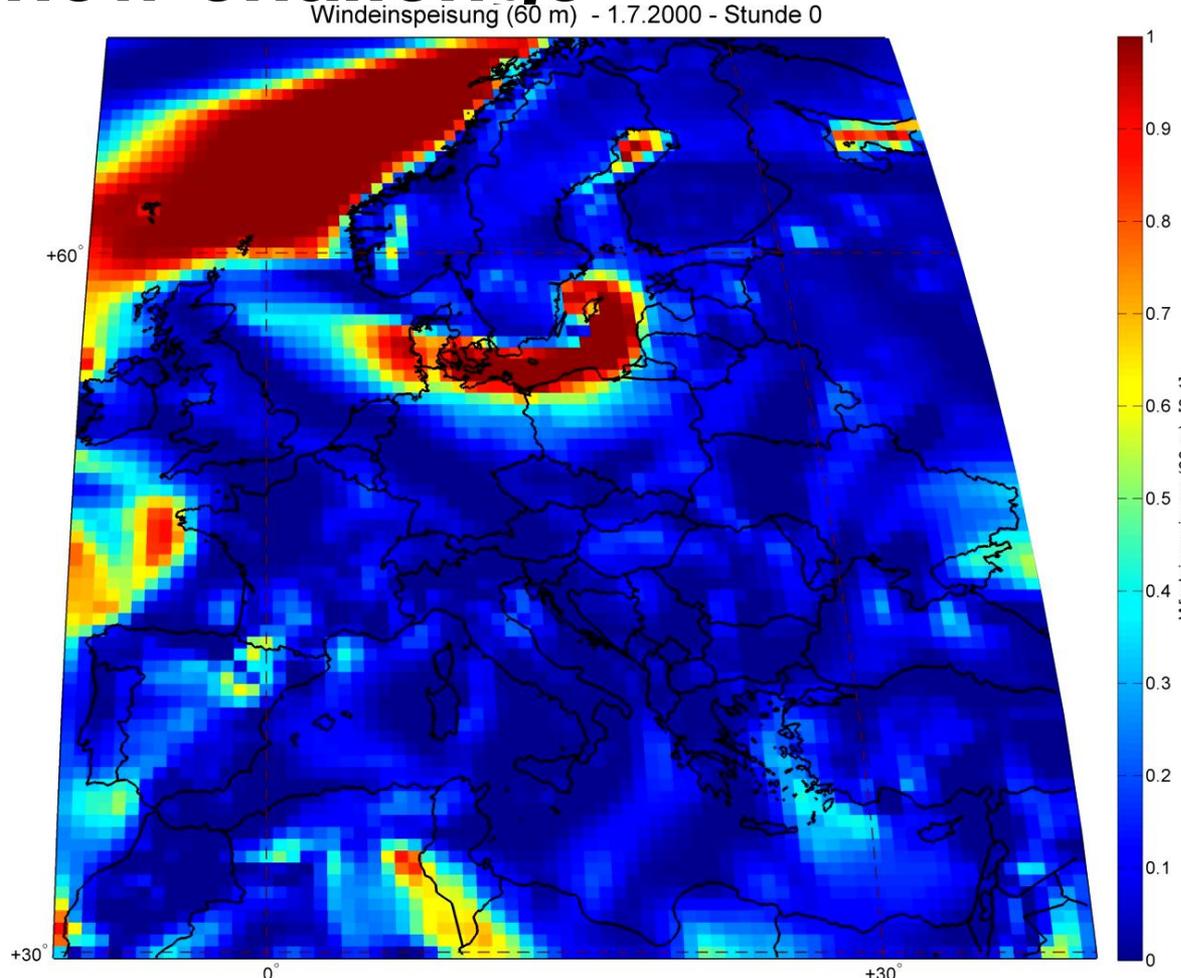


**Research Towards
Innovative Energy
Systems and
Materials,
3rd Colloquium of the Munich
School of Engineering**

Thomas Hamacher

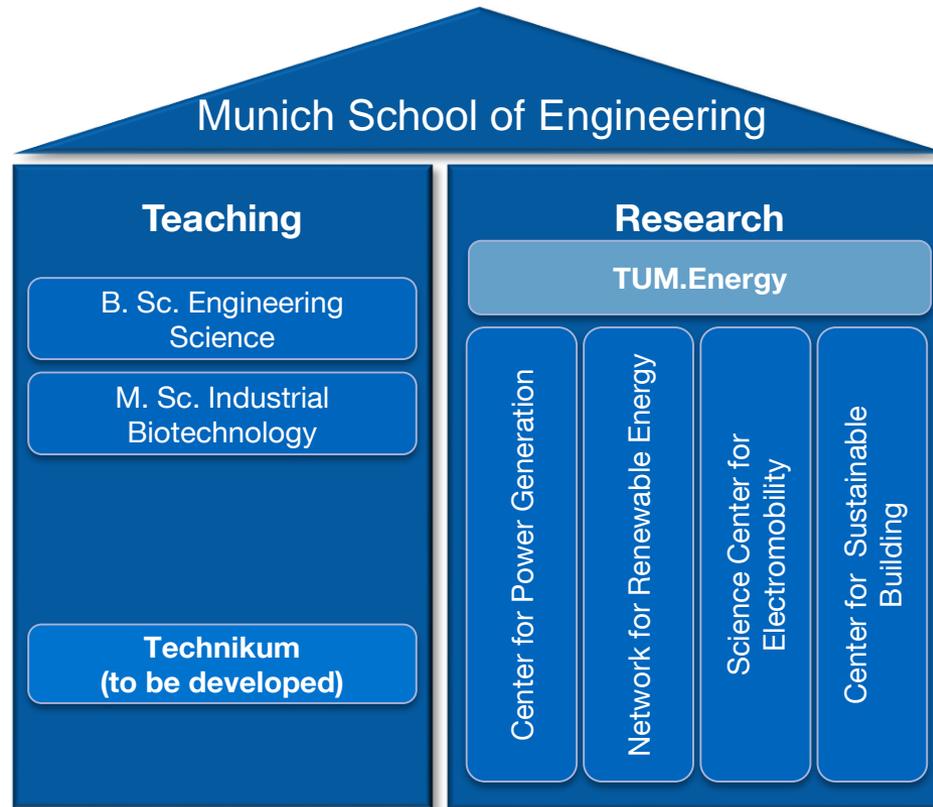
The new challenge

Windeinspeisung (60 m) - 1.7.2000 - Stunde 0



Source:
K. Janker

MSE: an Integrative Research Center



innovative, interdisciplinary
and research-oriented teaching

cross-faculty
research projects

Status of the MSE development

New Research projects

Status and development of teaching

Energy and information

Research: Energy Valley Bavaria

How flexible do future conventional power plants need to be to balance and control intermittent renewable sources and which technical changes need to be done in power plants to reach this flexibility?



Research: Energy Valley Bavaria

Organic PV-Cells:

Head: Dr. Eva Herzig



Smart city

Head: Dr. Vicky Cheng



Wind

Head: ???



Research: Energy Valley Bavaria

Power-to-gas

Control of wind farms

Nanostructuring of PV

Energy and Information



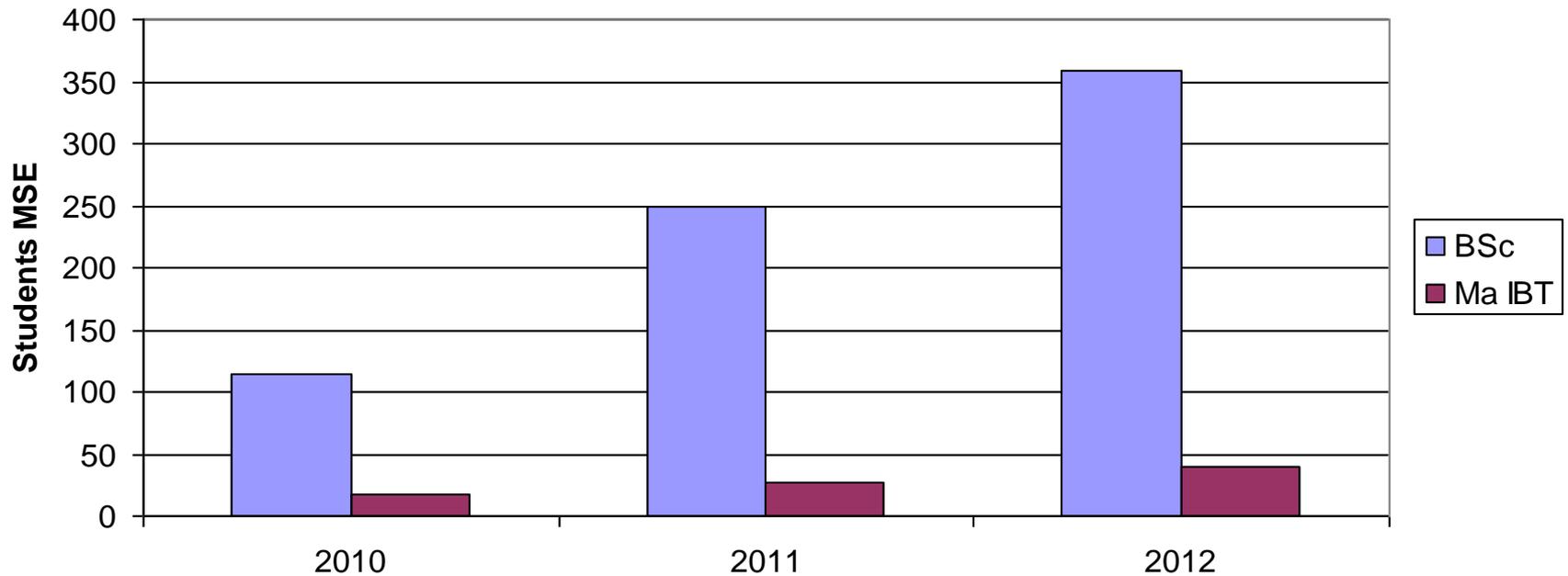
Status of the MSE development

New Research projects

Status and development of teaching

Energy and information

Teaching: „Engineering Science“; „Industrielle Biotechnologie“



Teaching:

School

University

Teaching:

MCTS and MSE will commonly offer a two semester course in public participation.

The course is split in a theoretical and a practical part.



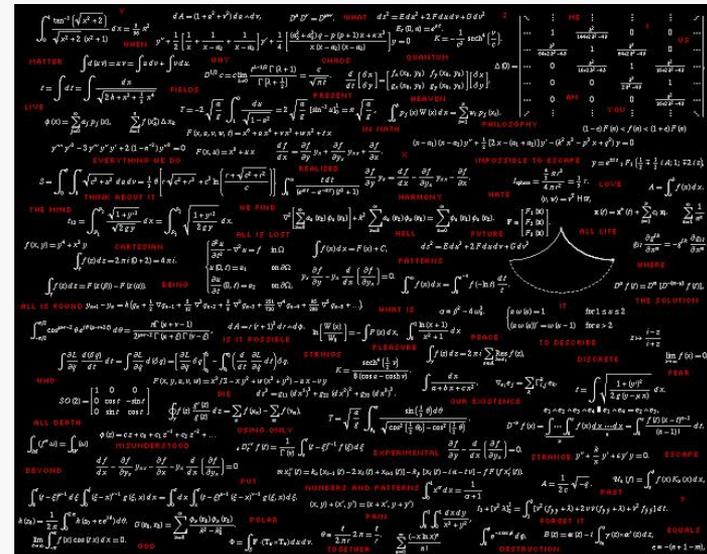
Teaching:

Graduate School:

Energy from the Caspian Sea Region



Hard courses in mathematics, control theory, ... in the Graduate School.



Status of the MSE development

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Energy and information

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Energy and information



Thank you for your attention!

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