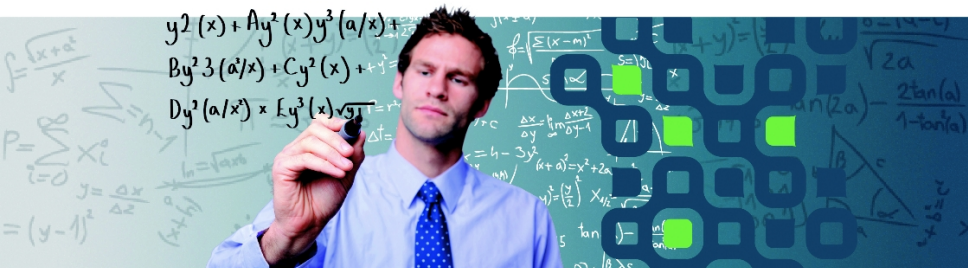


# Topsectors and Mathematics



E. Verbitskiy  
 PWN, Commissie Innovatie  
 5 april 2013, Nijmegen



# Topsectors

Agrifood , Energie , Logistiek, Chemie , High Tech  
Systems & Materialen, Water , Creatieve Industrie,  
Tuinbouw & Uitgangsmaterialen , Life Sciences & Health

## **Human Capital Agenda**

**Masterplan Béta en Technologie: 2.5 → 4**

Roadmaps, TKI's, Calls, Matching



# Math in Topsectors

- Math  $\subset$  Roadmap ICT  $\subset$  HTSM
- STW/NWO : Wiskunde Toegepast
- Not a single math. area seems large enough



# Funding & Calls

## Examples

- Cybersecurity (M€3,5, Oct.2012): no results yet.
- HTSM-1 (M€18=11.5+4+3.5): 32 projects (from 73)
- URSES: Uncertainty reduction in smart energy system (M€6.5, open)
- Energy: Shell-NWO



# Shell/NWO Program: Computational Sciences in Energy Research

- Funding: 21+20 mln, 75 PhD positions
- Indian PhD students via STCB
- Round 1, Oct.-Nov 2012:  
22 positions (4-5 in Math)



# New call for the Shell-NWO-FOM program (29.03.2013)

- deadline **26.04.2013**.
- $\approx$  12 PhD-positions
- Proposals = 5 pages max.
- External referees (!!!)
- Decision: late autumn 2013



✓ Proposals that concern one of the following four areas are explicitly welcomed:

- computational chemistry and materials science,
- multiphysics,
- big data,
- computational geoscience.

✓ Other areas are welcome, but proposals must be exceptionally good.

✓ Wise to join forces with one or more **renowned specialists** from one of the above four areas.



# Outlook

- Topsectors are important
- Outreach
  - ontmoetingsplaats (PWN supported by 3TU.AMI)
  - **SURFSara**, HPC in NL
- Collaborate, academic and industrial partners
- Math in the context of other fields (Math inside)
- Big problem  $\mapsto$  relevant mathematics
- Mathematics is rarely in a driving seat





# However,

... there are exceptions!

Liquid Natural Gas

Prof.dr.ir. J.A.M. (Jacques) Dam

Professor LNG Systems

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