

# A new modelling group in Bremen



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# Who are we?

- A new research group
- Joint between Institute of Environmental Physics (IUP-UB) and Marum
- Start: 01 Jul 2015

## *Group members:*

- Prof. Mihalis Vrekoussis (Group leader)
- Dr. Andreas Hilboll (PostDoc)
  - N. N. (PostDoc)
  - N. N. (PhD student)
  - ...



# What do/will we do?

Integrated analysis of measurements and simulations of tropospheric composition:

- Identify current knowledge gaps in atmospheric processes by model/measurement comparison
- Invert greenhouse gas (ocean/atmosphere and anthropogenic) and  $\text{NO}_x$  fluxes
- ...

# How will we do this?

What a surprise: TM5 :)

- Get TM5-MP up and running
- Get TM5-4dVAR up and running  
(Improve parallel capabilities of TM5-4dVAR)

Proposal for small HPC cluster:

- ~36 nodes (2x12-core Intel Xeon Haswell)
- ~5TB RAM
- ~700TB storage

# How will we participate?

- We're the ideal test-case for existing documentation
- We'll expand on existing and write new documentation from our experiences in getting started
- We'll give back all our code changes to the community (→ or just develop in a new branch in the existing repository)
- We're here to learn, share, and give back