

# Solution of inverse problems in cryo-electron microscopy



FACULTY OF MATHEMATICS AND PHYSICS Charles University

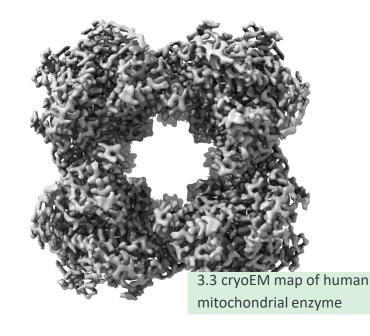
#### Challenge

Improve image reconstruction in 3D cryo-electron microscopy (cryoEM) for molecular and nano-scale imaging.

### NUMERICAL ANALYSIS AND FAST ITERATIVE SOLVER FOR 3D INVERSE PROBLEMS

## Goals

- Analyze basic models in single particle analysis cryoEM.
- Propose and build efficient method for inner reconstruction in single particle analysis.



## Benefits

The research opens up new avenues for application of iterative methods in single particle analysis cryo-EM.



H2020 SOCIETAL CHALLENGES

Europe in a changing world - innovative

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