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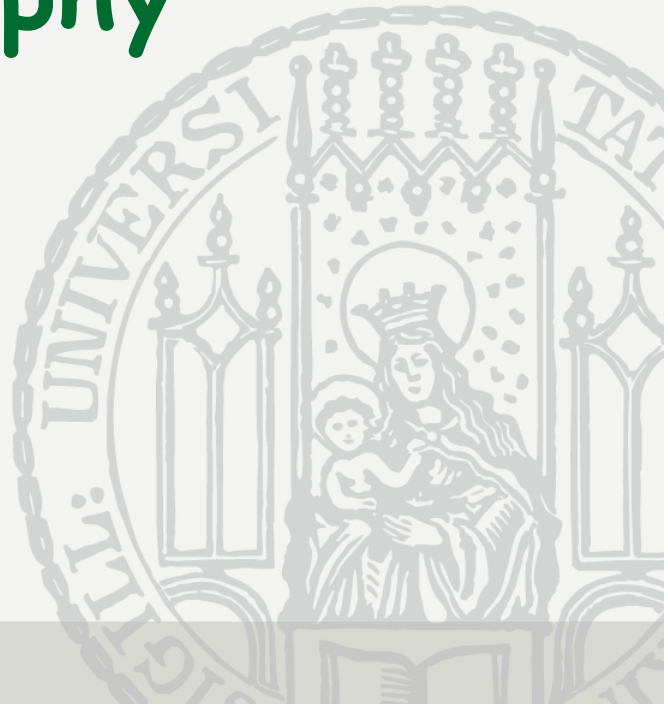
GEOTECHNOLOGIEN

TOAST
TOolbox for Applied Seismic Tomography

Ilaria Mosca



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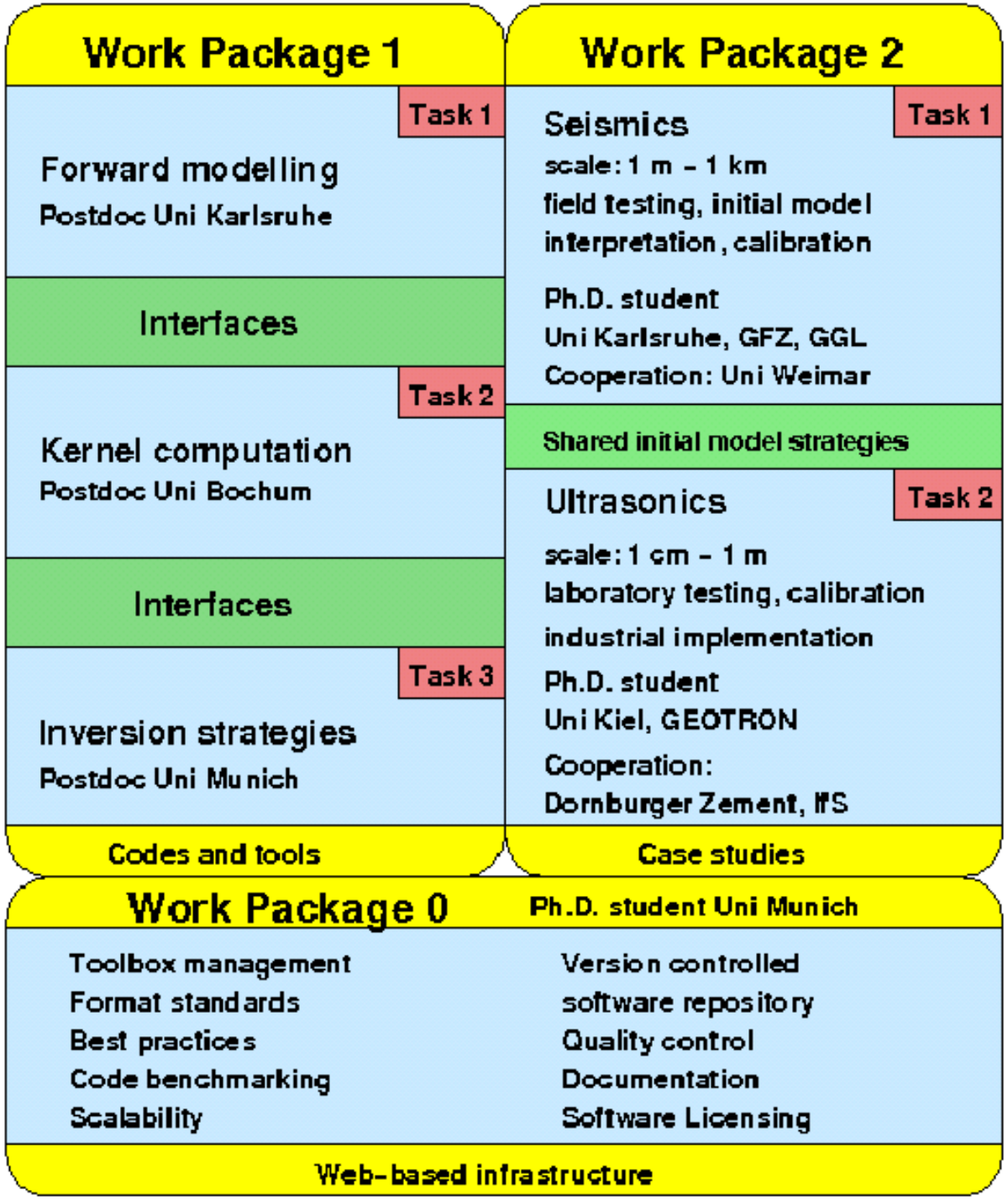
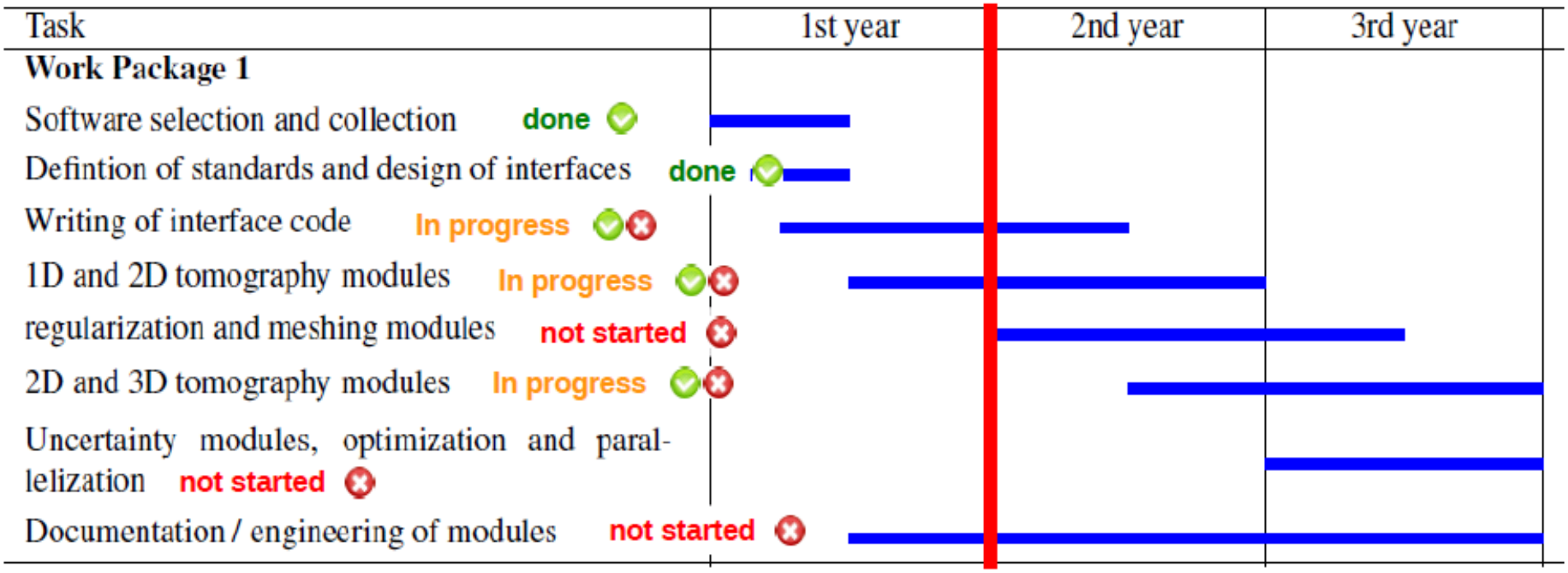
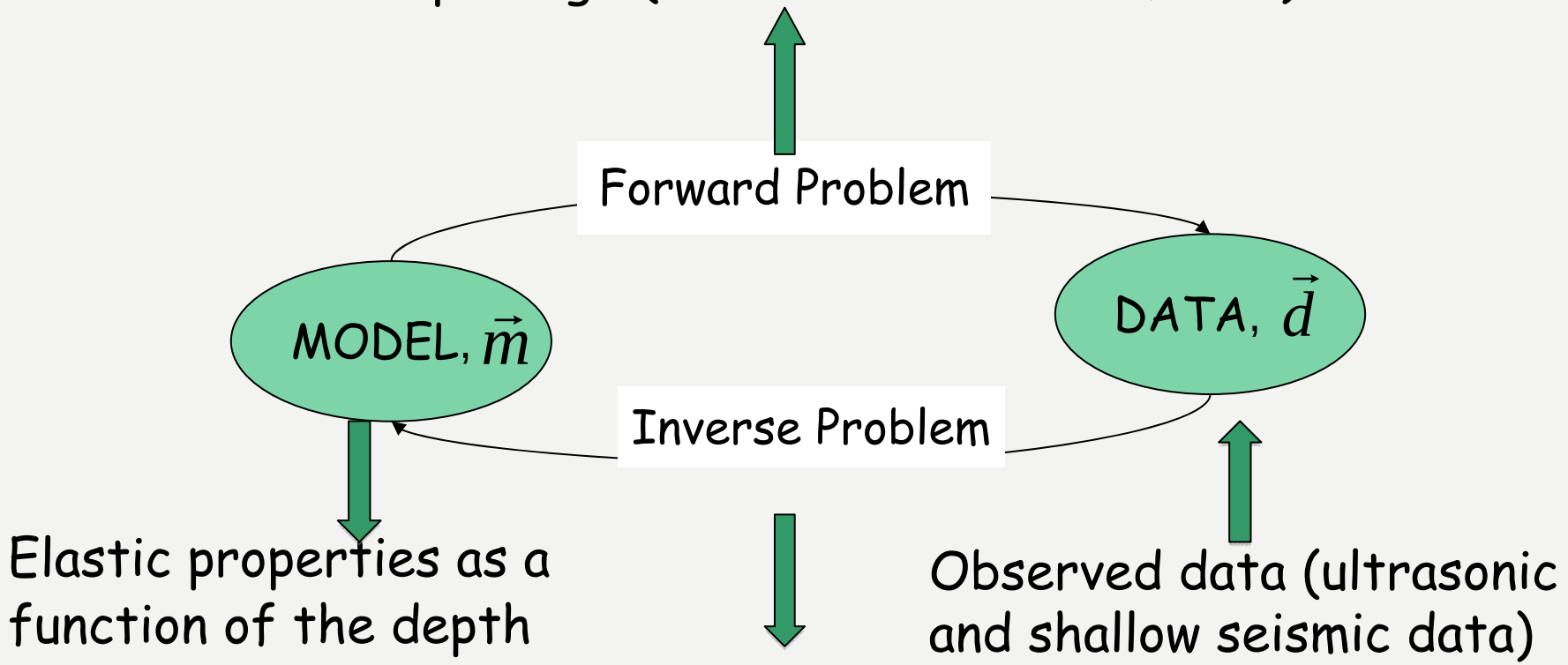


Proposal vs. Reality of WP1



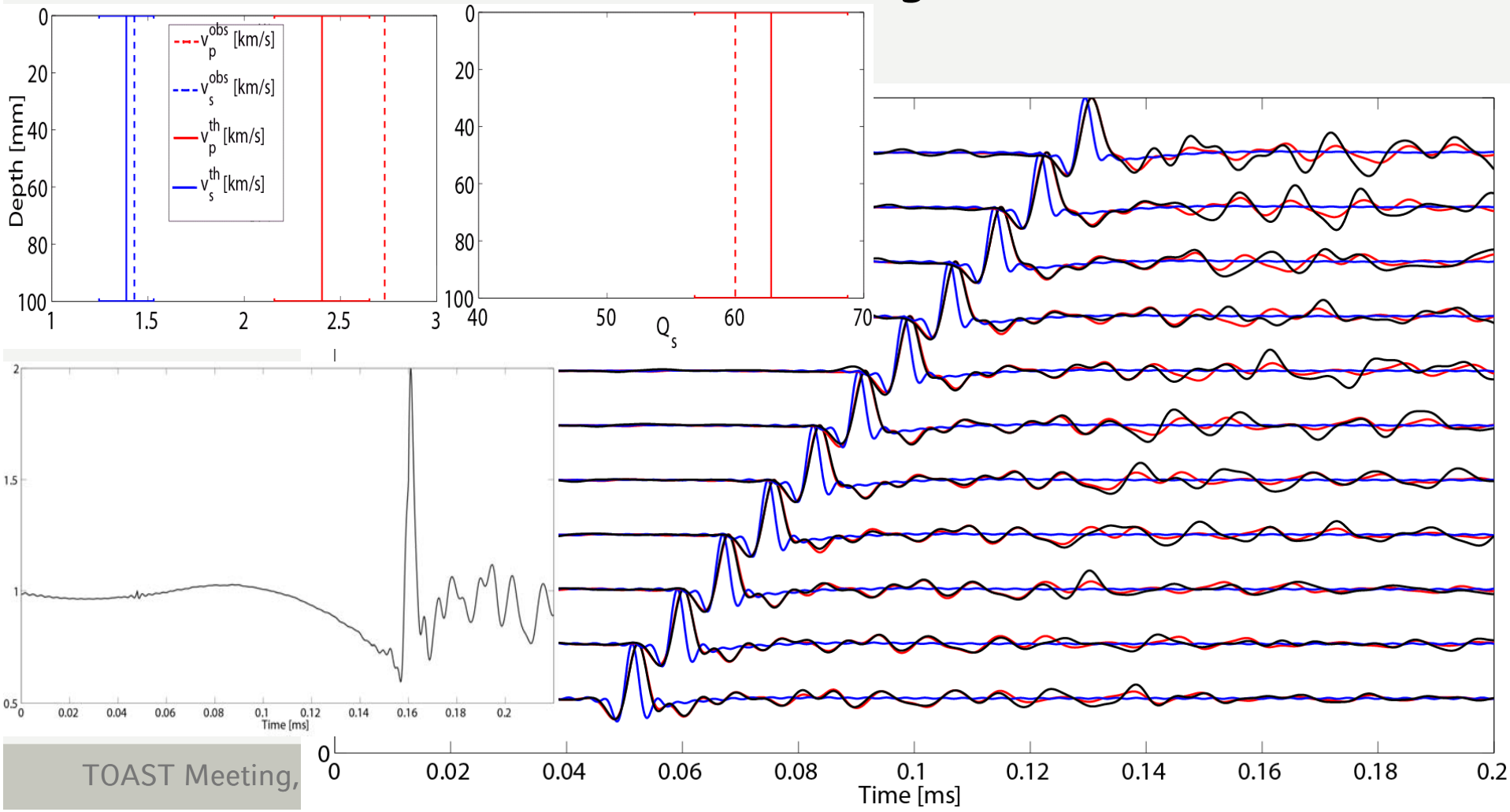
WP1 – Task 3: Inversion strategy

Gemini package (Friederich & Dalkolmo, 1995)

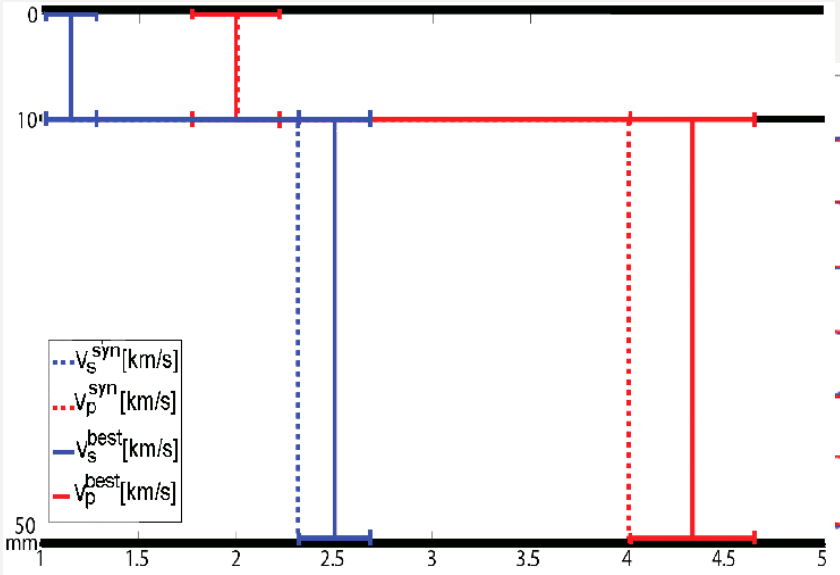


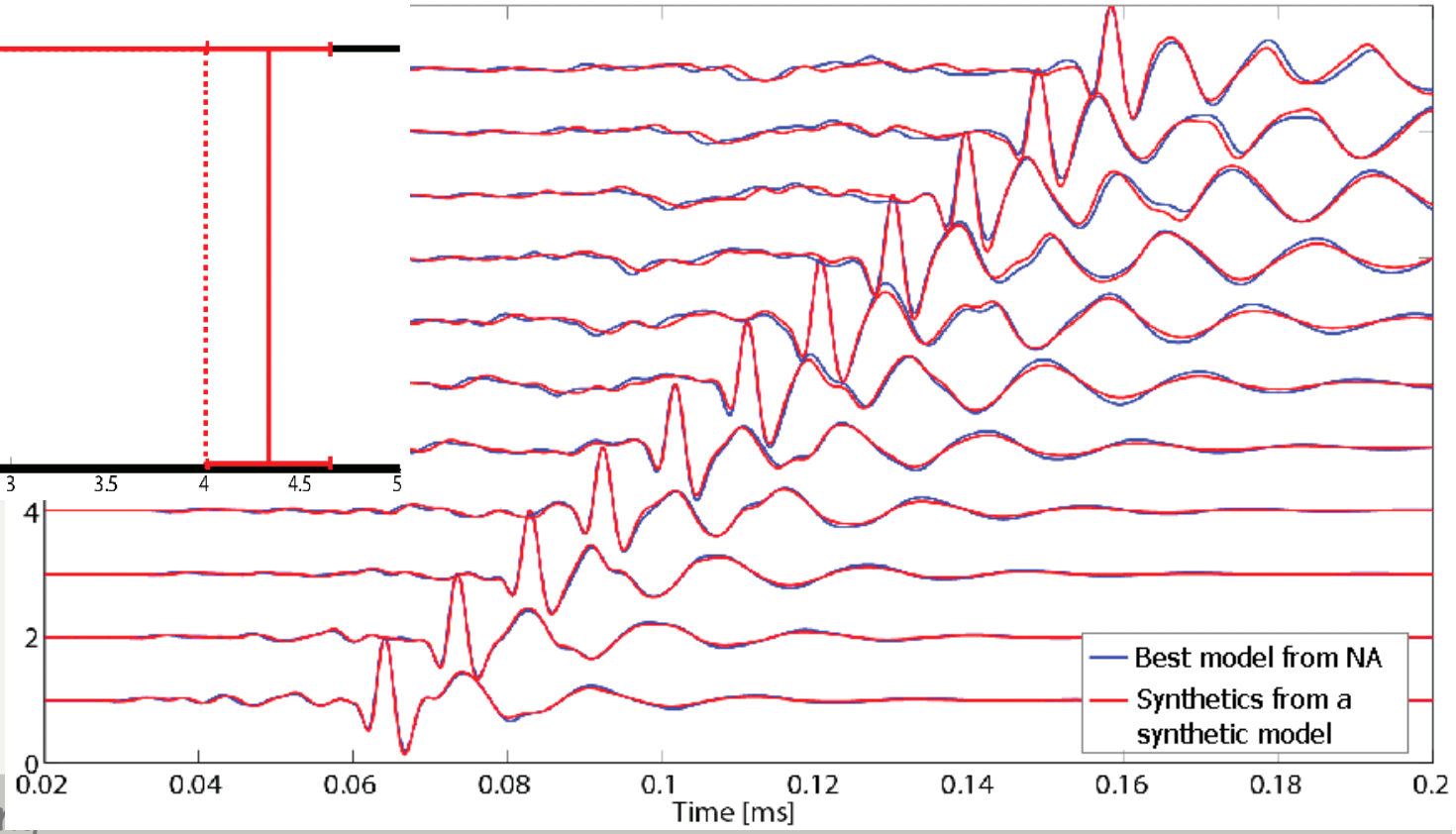
Neighbourhood Algorithm (Sambridge, 1999a,b)

Vs and Qs inversion of ultrasonic surface wave measurements recorded for a Plexiglas block.

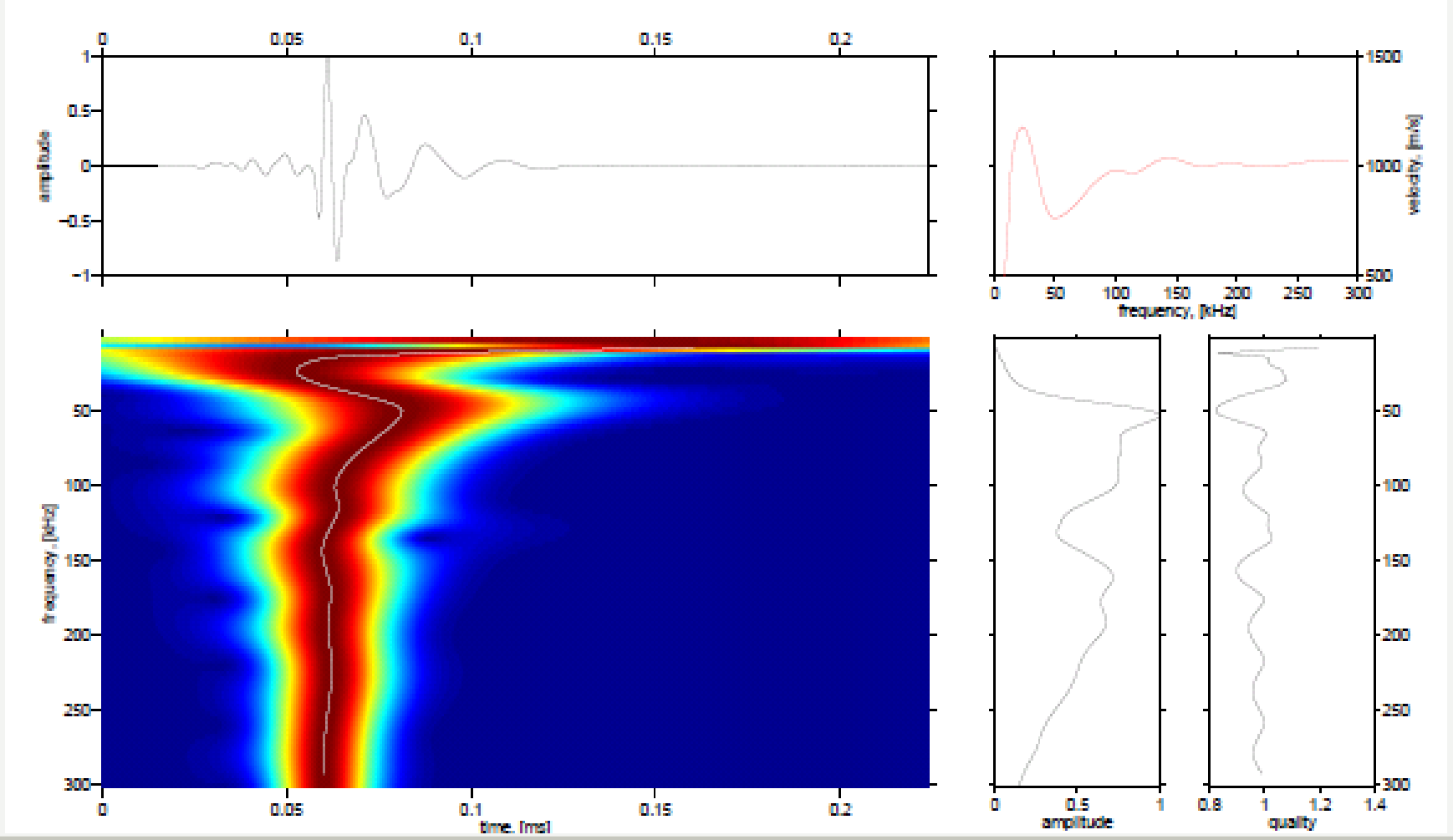


Study of the ultrasonic surface-wave propagation through synthetic layered structures.





Group velocity dispersion analysis of the 1st trace.



Next steps of WP1-Task 3:

- Inversion of ultrasonic measurements for (un)weathered samples as well as the shallow seismic datasets.
- Phase velocity dispersion analysis for synthetic structures.
- Misfit function in terms of phase velocity.

Next steps of WP1:

- First version of the toolbox to interchange modules and interfaces.
- Benchmark testing of inversion strategies