

Obelics WP 3.4 D-ANA LOFAR status

Tammo Jan Dijkema
Obelics F2F Madrid, 15 September 2016



ASTERICS
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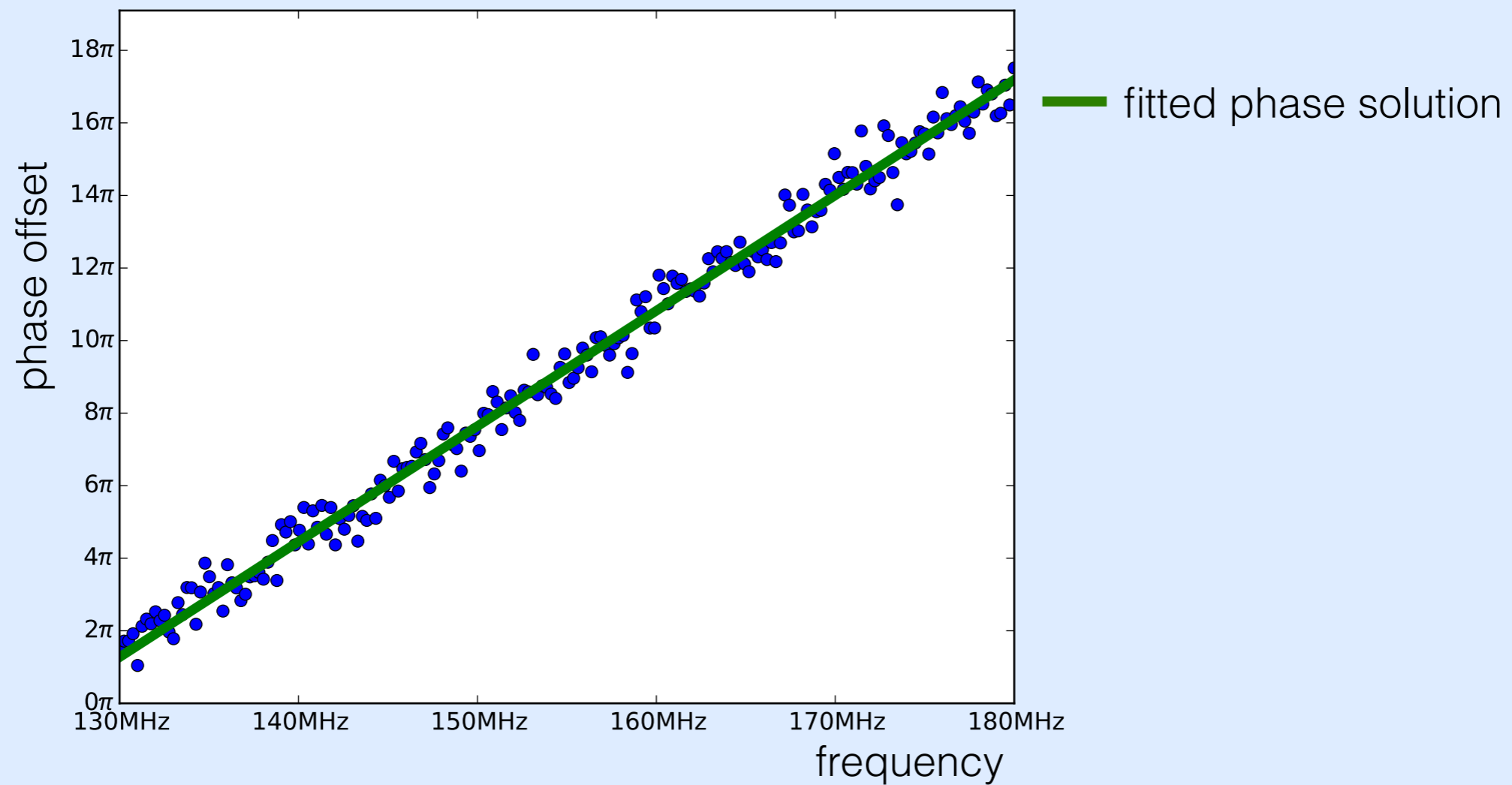


3.4 LOFAR / ASTRON overview

- Persons working on WP3.4:
 - Tammo Jan Dijkema
 - Bas (Sebastiaan) van der Tol
- Topics:
 - Calibration algorithms + implementation
 - Imaging algorithms + implementation

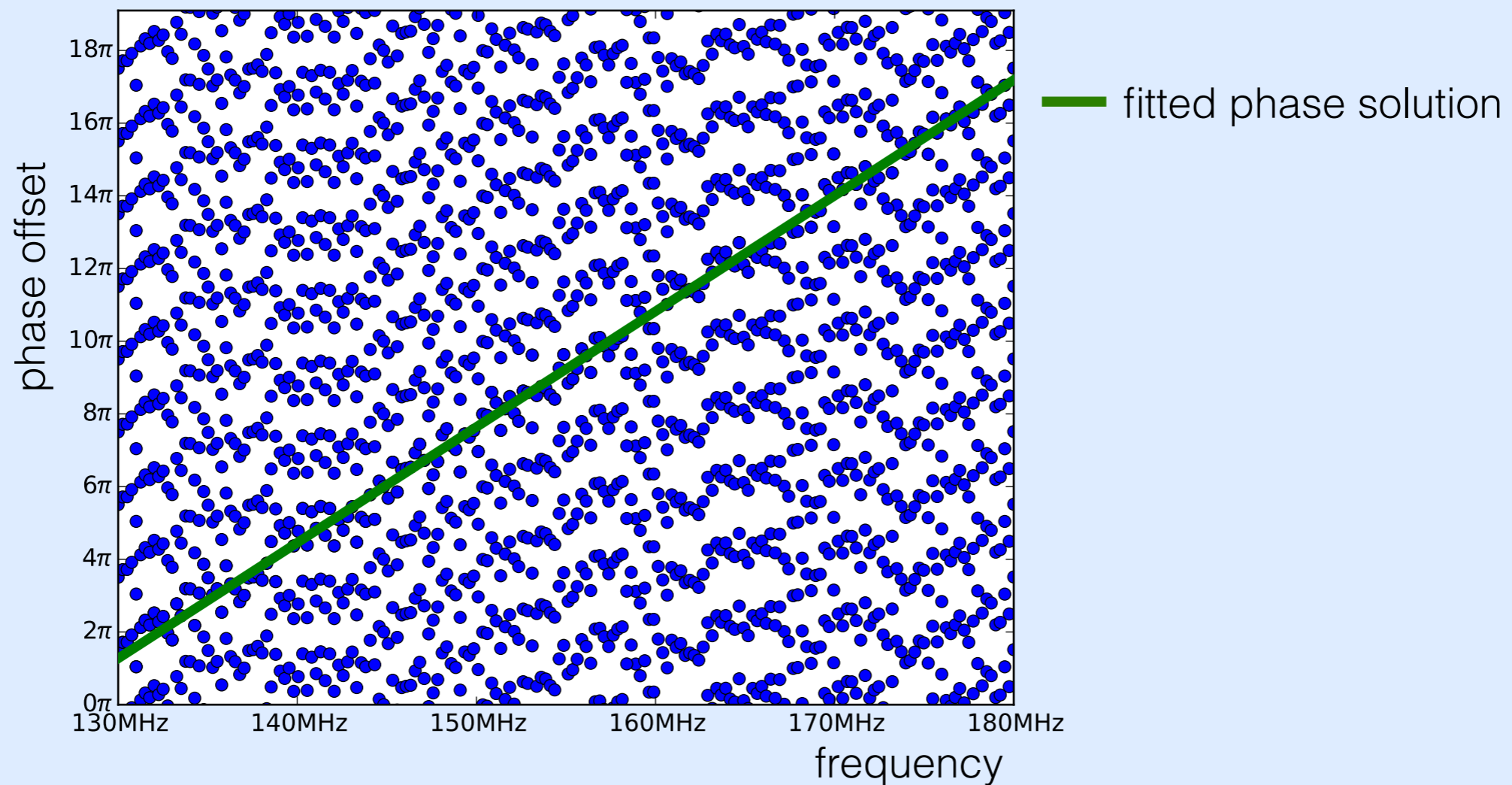
LOFAR calibration

- Developing a calibration algorithm that can fit phase slopes over large bandwidth
 - Taking phase wraps into account



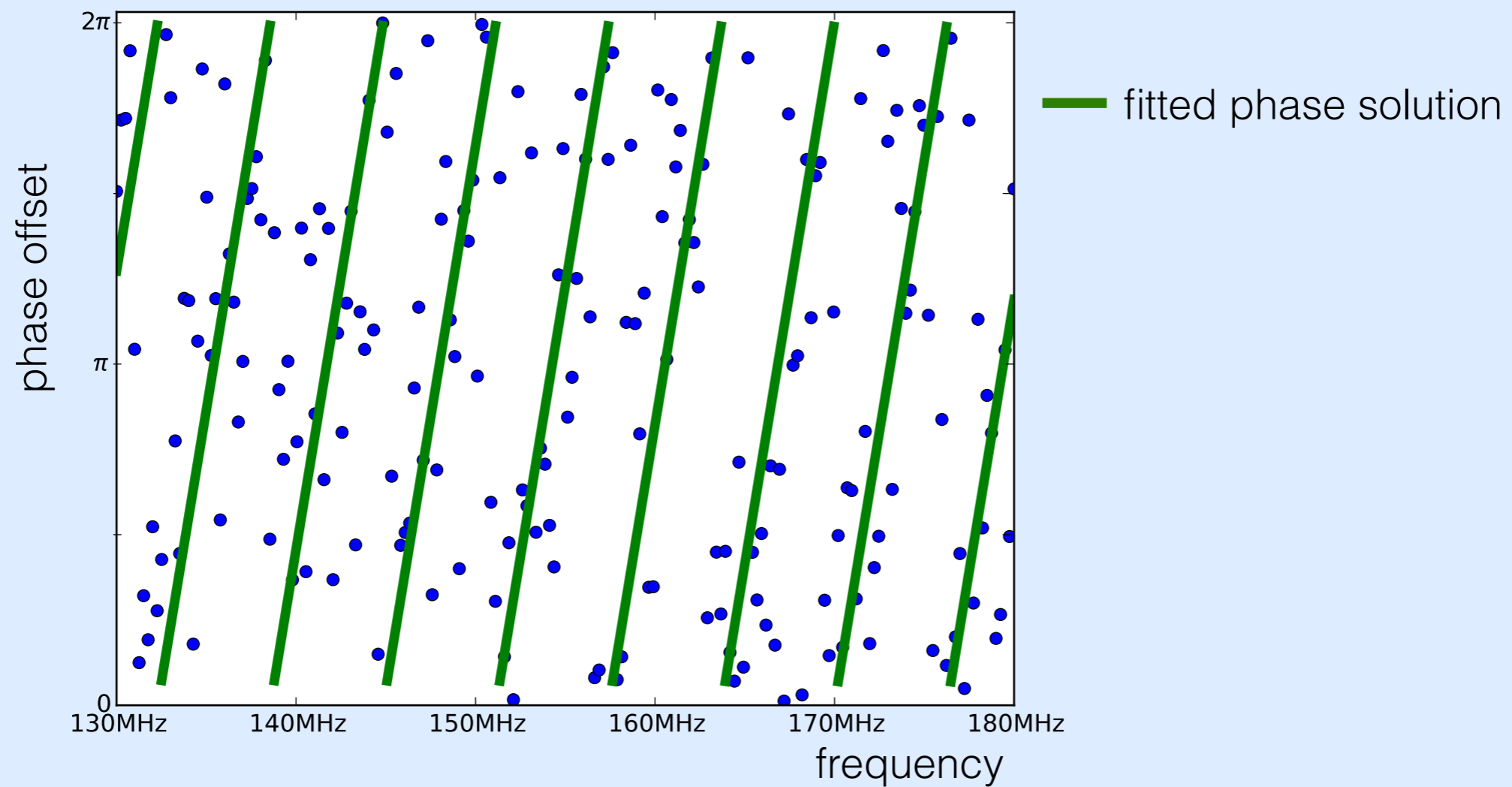
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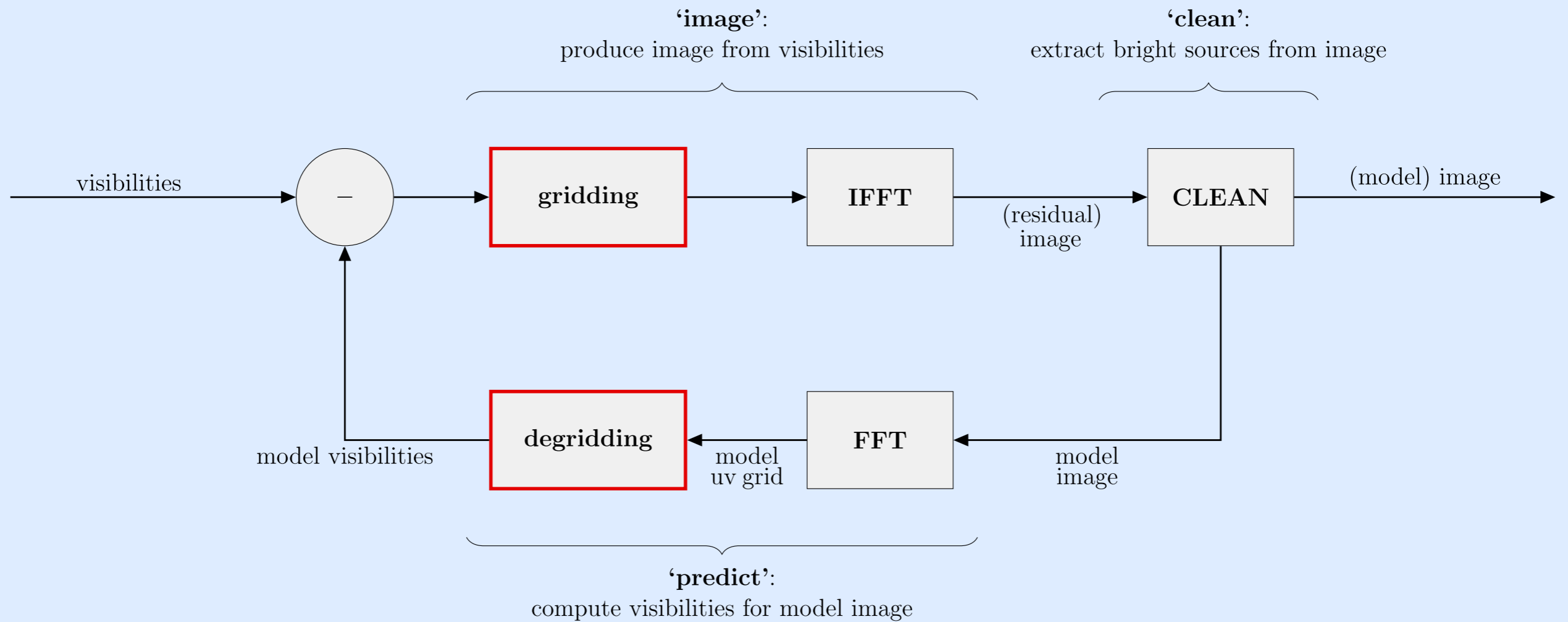


LOFAR calibration

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LOFAR imaging



LOFAR imaging

- Image Domain Gridding
- Patent pending :-)
- Tested on many GPUs

- Developed as separate library, to be implemented into other imager
 - ~~CASA~~
 - Adapted CASA:
 - casasynthesis (split off part of CASA)
 - AWImager2 (Imager that uses casasynthesis)
 - WSClean