



Uliège VLTI expertise center

Denis Defrère

Overview

University of Liège

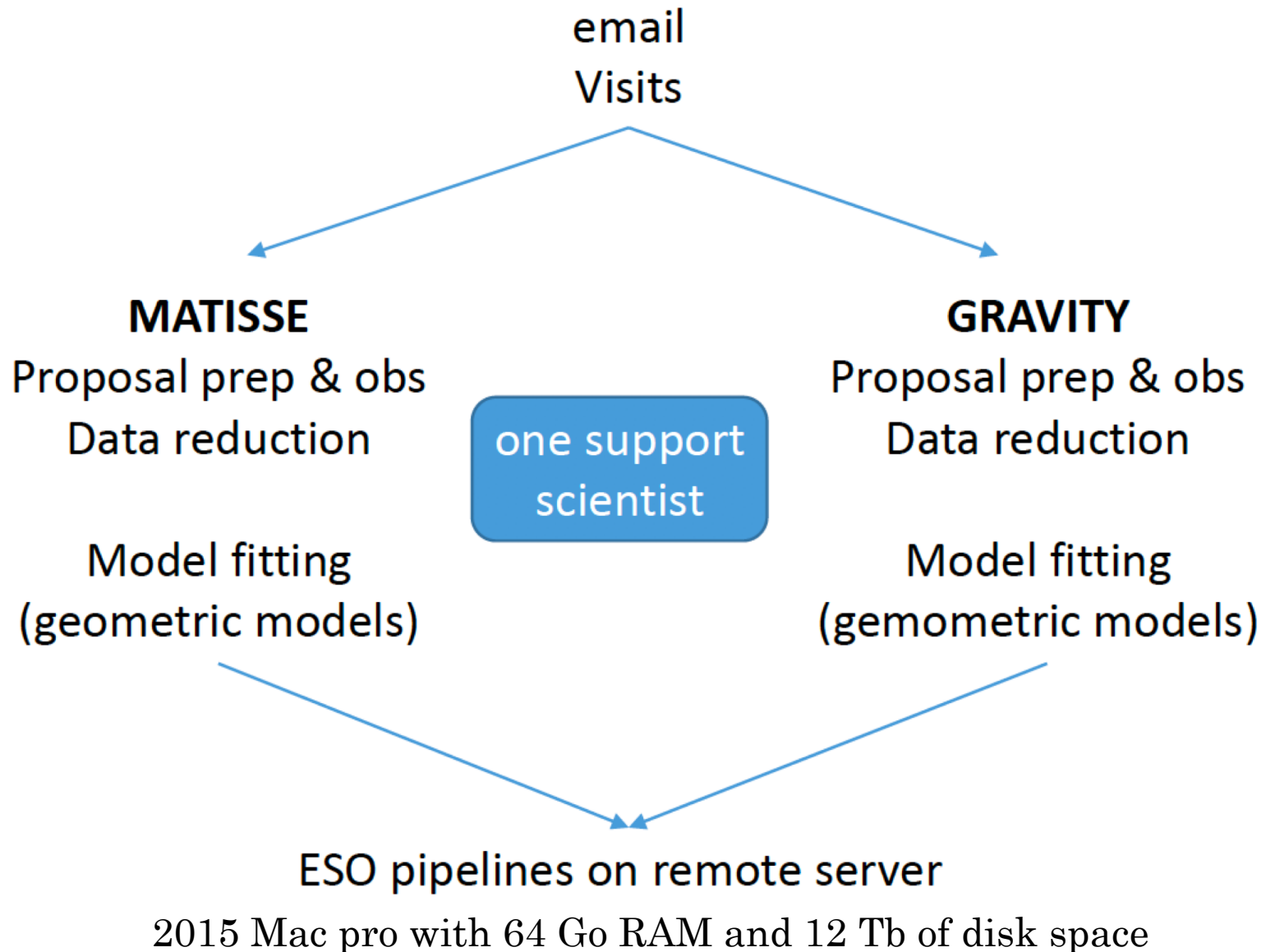
Coordinator: Denis Defrère

Lead Scientists: Olivier Absil & Jean Surdej



- One of interferometry OPTICON-JRA (WP8) lead partners
- Main area of interferometry-related expertise:
 - ✓ High-contrast applications (CHARA, VLTI, LBTI, KI)
 - ✓ End-to-end instrument simulation (GENIE, 2GFT, Darwin/TPF)
 - ✓ Advanced data reduction techniques (e.g., self-calibration)
 - ✓ Nulling testbench (CELINE)
 - ✓ Exozodiacal disk detection and characterization
 - ✓ Massive stars
 - ✓ Binary detection

Center capabilities



Recent activities

- **Phase1 proposal preparation, OB preparation, and data interpretation** for GRAVITY program on WR48 (**Theta Muscae**, [099.D-0440\(A\)](#), [0101.D-0732\(A\)](#), PI: E. Gosset @ Uliège).
- Visitor: Narges JAMIALAHMADI (IPM Institute, Fizeau exchange visitor program): geometric modelling of 51 Oph (PIONIER)
- **Support from Antoine critical** for more advanced requests (spectrum extraction of each component)
- Dissemination;
 - Networking activities (KUL, BELSPO)
 - Websites (STAR institute @ ULiege, personal website)

Future activities

- Received ERC funds to build Hi-5 (possible VLTI visitor instrument). Postdoc in support of the VLTI center (~May 2020).
- Organization of **Expertise Centre Meeting** and **VLTI Open Day** in Liège (**May 2021**, new OPTICON proposal)
 - **EC meeting**: Annual one-day meetings to discuss the Centres' performance and roadmap
 - **Open day**: A concerted VLTI Expertise Centre dissemination activity
- Support for 2-3 visiting scientists per year (Face-To-Face meetings)
- Contact: D. Defrère (ddefrere@uliege.be)