



4MOST – 4m Multi-Object Spectroscopic Telescope

Planning for 4MOST:
toward the 4MOST survey programme

Roelof de Jong, PI (AIP)
4MOST Consortium

9 July 2020

www.4MOST.eu



Welcome

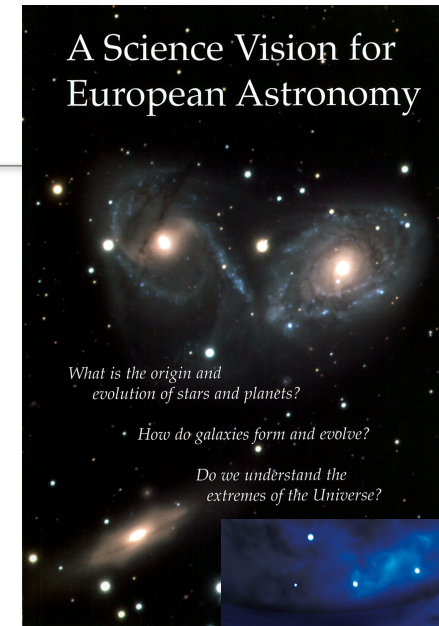


- Workshop goals
 - Provide the invited teams with up-to-date information regarding the selection process
 - Provide the invited teams with an opportunity to present their operational requirements and to discuss their integration into the 4MOST operational model
 - Provide the invited teams with an introduction to the available tools to prepare their proposals (e.g. 4FS)
 - Foster scientific collaborations and to prepare for the integration of potential Participating Community Surveys into the 4MOST Science Team
- Bottom line
 - Let's get to know each other and let's start collaborating

A bit of history

- 2010 – First Letter of Intent to ESO (4mMOSST)
- 2011 – 4MOST and MOONS selected for Concept Design study by ESO in response to Call driven by European strategy documents
- 2013 – Both 4MOST and MOONS selected for implementation
- 2015 – ESO Agreement signed
- 2016 – Preliminary Design Review
- 2019 – Final Design Review,
Call for Proposals Readiness Review

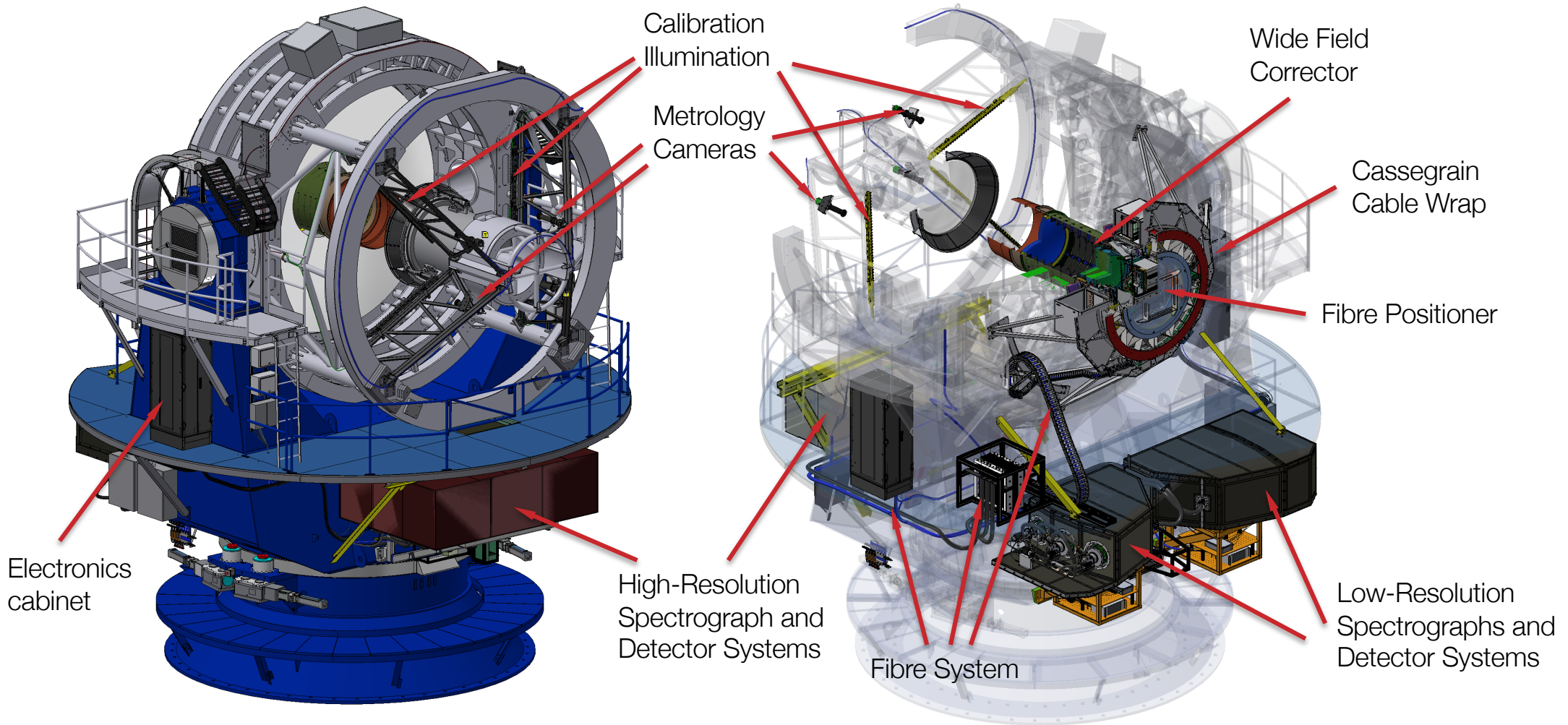
Currently in Construction Phase



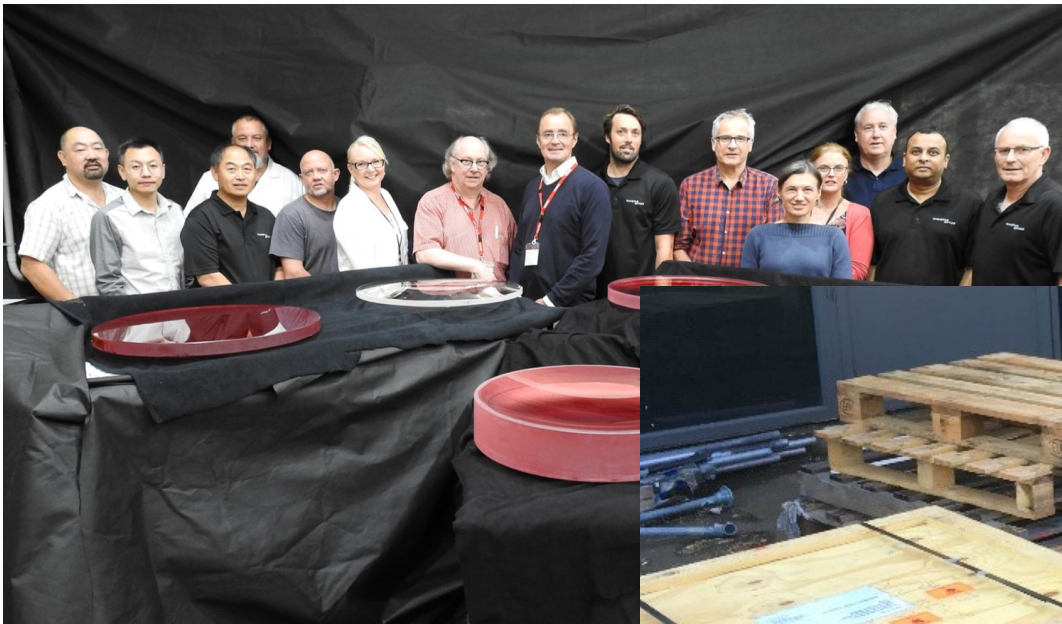
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MOST



4MOST on VISTA

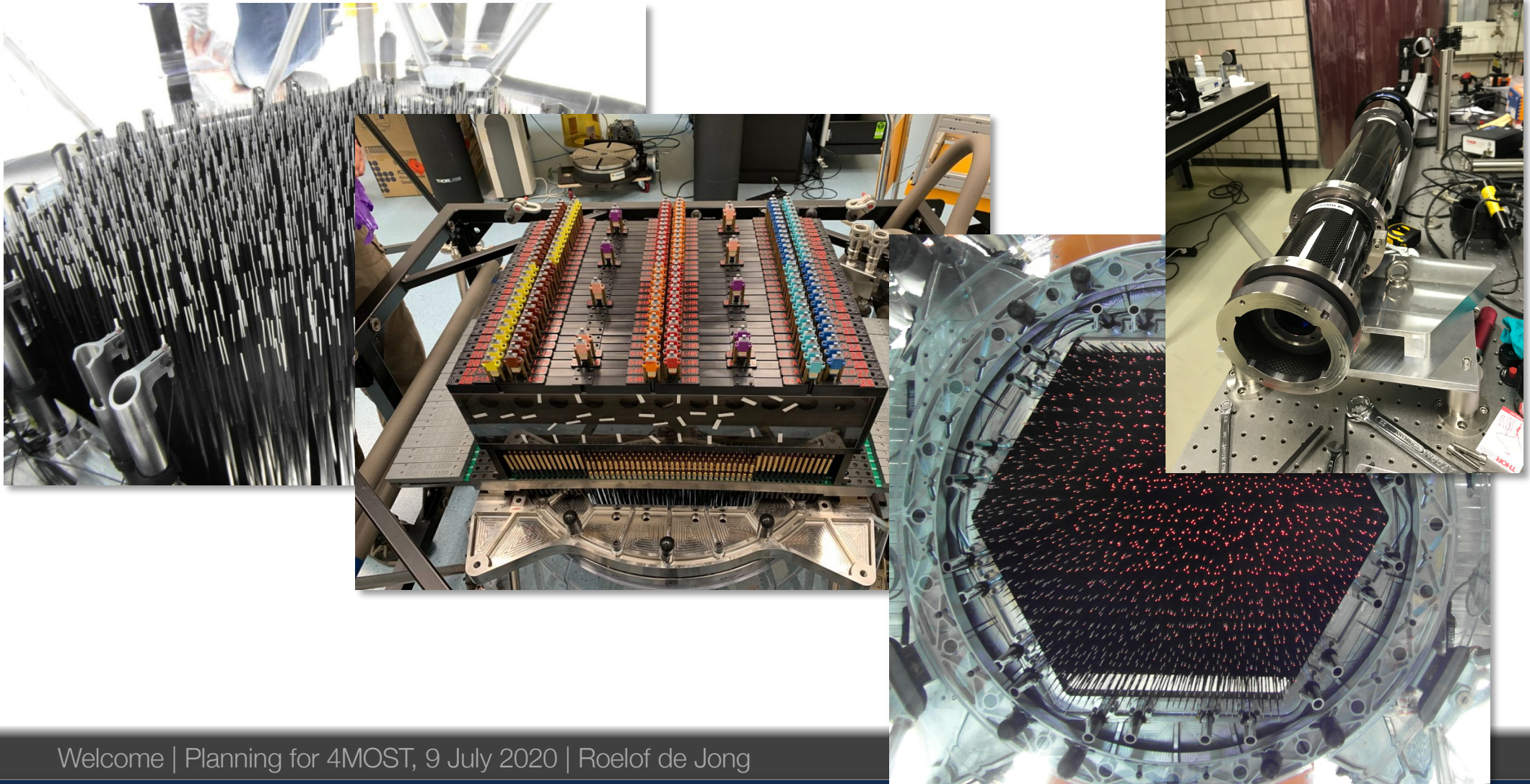


Wide Field Corrector



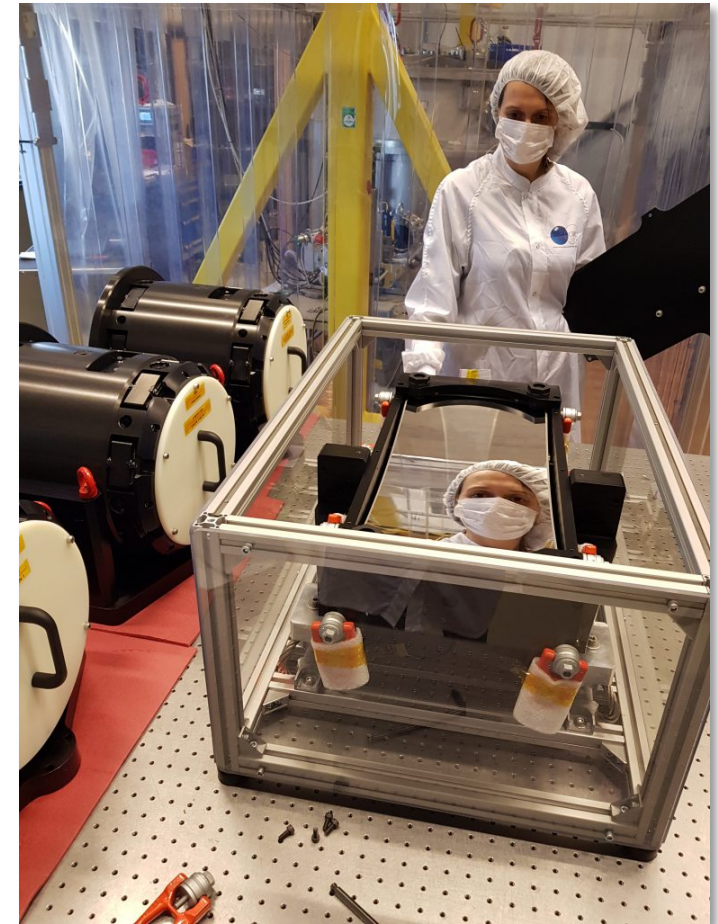
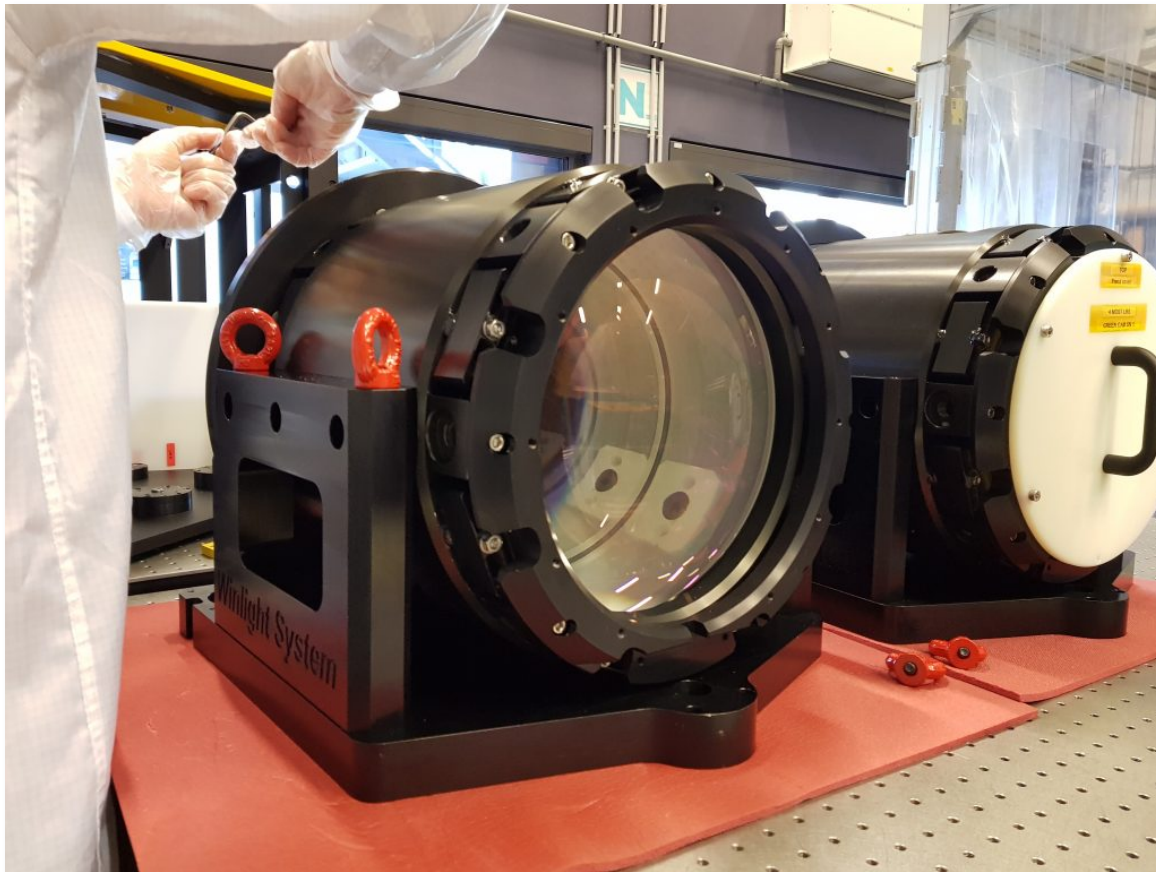
Fibre Positioner AESOP + Metrology

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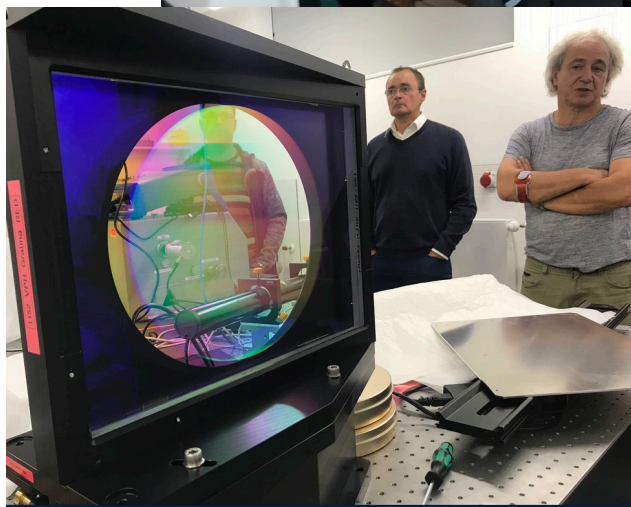


Low Resolution Spectrograph

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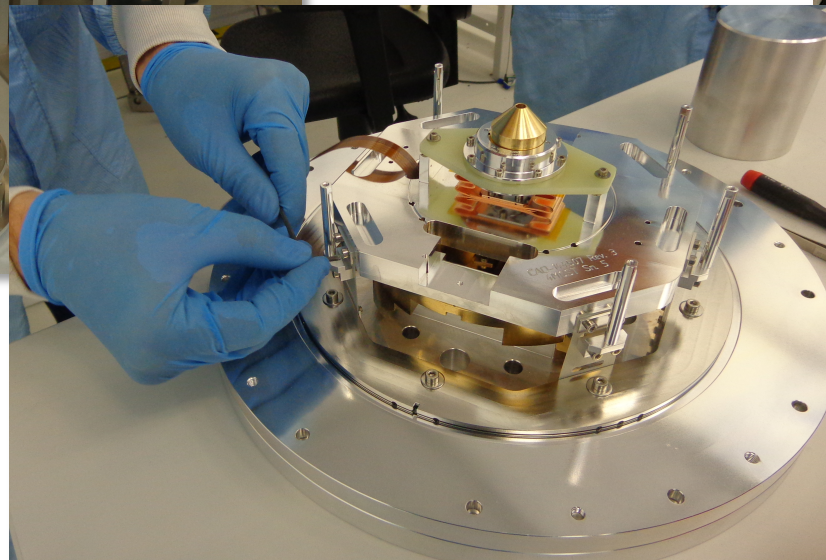
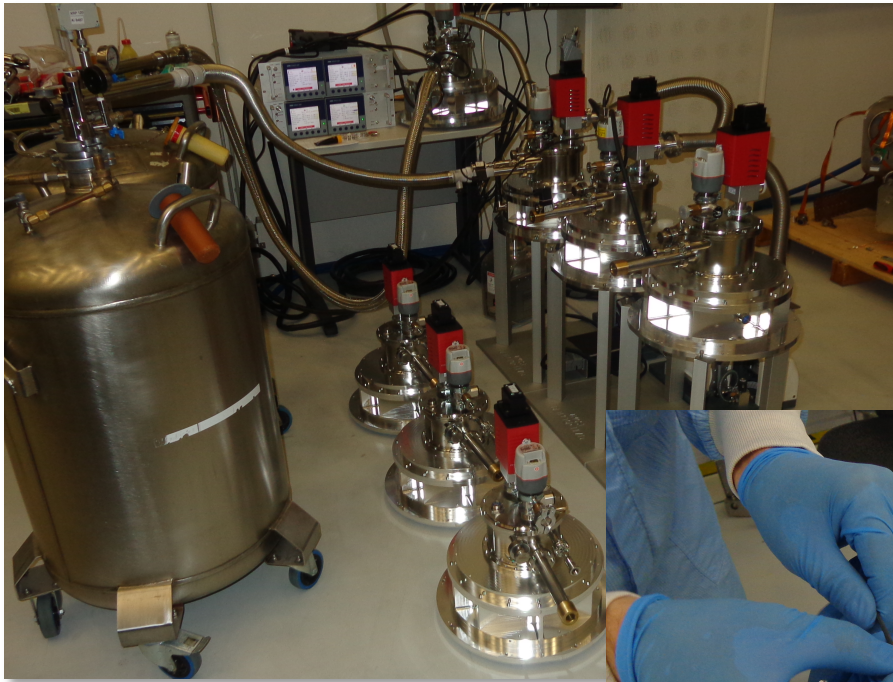


High Resolution Spectrograph



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Detector Systems



Schedule and Milestones



- March 2019:**
 - *Final Design Review-2*, detailed designs finalized
- Dec 2019:**
 - *Call for Proposals Readiness Review*, ready for Phase I community proposal selection
- 15 Dec 2020**
 - *Call for Letters of Intent*, deadline Feb 28, 2020
- Feb 2021:**
 - All subsystems manufactured, assembled, integrated and verified
- Feb 2022:**
 - Full system integrated and verified at AIP, *preliminary acceptance Europe (PAE)*
- Nov 2022:**
 - System delivered, installed and commissioned on telescope, *preliminary acceptance Chile (PAC)*
- Nov 2022 – Oct 2027:**
 - First science survey of 4MOST, 30% of targets available for Community Surveys

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Ten Consortium Surveys



No	Survey Name	Survey (Co-)PI
S1	Milky Way Halo LR Survey	Irwin (IoA) , Helmi (RuG)
S2	Milky Way Halo HR Survey	Christlieb (ZAH)
S3	Milky Way Disk and Bulge LR Survey	Chiappini, Minchev, Starkenburg (AIP)
S4	Milky Way Disk and Bulge HR Survey	Bensby (LU), Bergemann (MPIA)
S5	Galaxy Clusters Survey	Comparat (MPE)
S6	AGN Survey	Merloni (MPE)
S7	Galaxy Evolution Survey (WAVES)	Driver (USW), Liske (UHH)
S8	Cosmology Redshift Survey	Richard (CRAL), Kneib (EPFL)
S9	Magellanic Clouds Survey	Cioni (AIP)
S10	Time-Domain Extragalactic Survey (TiDES)	Sullivan (Southampton)

4MOST who is who?

And 350+ others!



Roelof de Jong
Principal Investigator



Joar Brynnel
Project Manager



Jakob Walcher
Operations Manager



Genoveva Micheva
Instrument Scientist



Vincenzo Mainieri
Project Scientist ESO



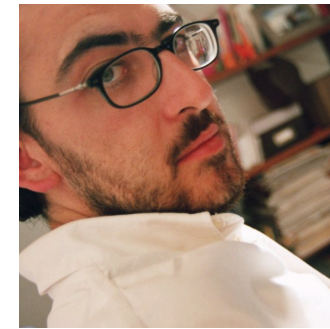
Sofia Feltzing
Project Scientist
Galactic



Richard McMahon
Project Scientist
extragalactic



Joe Liske
Chair Science
Coordination Board



Andrea Merloni
Lead Operations
System



Peder Norberg
Operations
Scientist

More information



- www.4most.eu
- help@4most.eu



- 4MOST Issue of ESO's The Messenger (no. 175)

Some guiding principles



- Fairness
 - People get awarded for effort put in
 - Give credit where credit is due
- Respect
 - Stay correct, even if you disagree
- Openness
 - Everybody has the right to speak their mind
 - No hidden agendas
- Science guides our decisions
 - We all have our personal and institute agendas, technology interests, but in the end we should do what is best for the science
- Bottom line: be nice, be professional, work as a team

Virtual etiquette



- Try to stay on time!
- Talks are being recorded for later use
- During talks:
 - Mute microphone, switch camera off
 - Place questions in chat
- Continued discussions:
 - Use slack workspace (see email)
- Use virtual social meetings to get to know each other

