

ORP – OPTICON-RADIONET PILOT

Colibri SVOM workshop 8-10 November, OHP

Coordination CNRS 15 M€/ 4 years 37 PARTNERS Start date: 1st March 2021

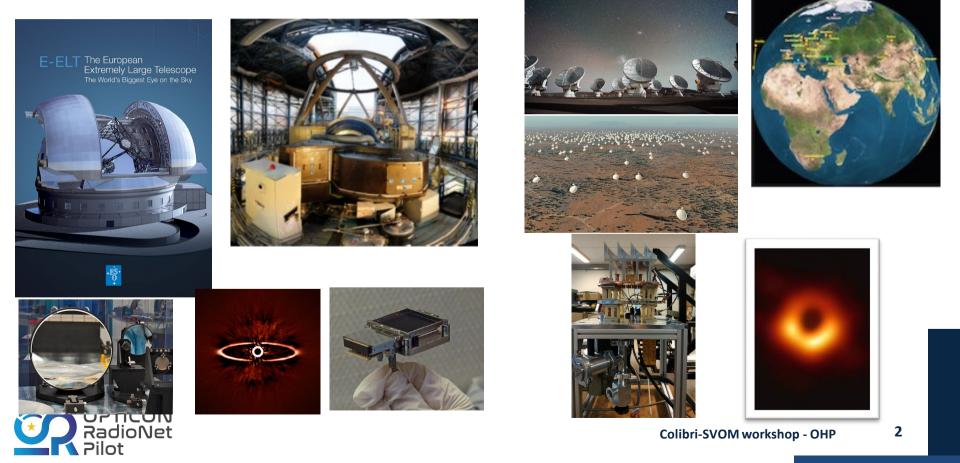
Jean-Gabriel Cuby, Hélène Dworak CNRS/Aix-Marseille University/LAM On behalf of the ORP consortium





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Merging of two highly successful programmes funded for more than 20 yrs by the EC, OPTICON and RadioNet



ORP in a nutshell

- Pilot for a new model of Integrating Activities
- Access: Trans-national and virtual access to infrastructures (60% of the budget)
- Joint activities to facilitate and integrate the access procedures and to improve the services the infrastructures provide
- Training
- **Strategy**: Establish the optimal conditions for the long-term engagement of funders in making trans-national access sustainable beyond the EU funding
- Pilot demonstrations (< 4 yrs) of the proposed long-term strategy (> 4 yrs)











Accessibility, Equal Opportunities and Diversity

- ORP Gender and Diversity Policy
- Mapping of Gender Equality and Diversity Indicators and Best Practices
 - Data/information collection (numbers, policies, best practices) to develop policies, guidelines and recommendations
 - Training schools focusing on young astronomers to ensure gender balance but also diversity (nationalities, educations paths) and to address EDI matters and career development issue in specific sessions
 - Improving trans-national and virtual access processes to enhance accessibility and equal opportunities (e.g. dual anonymous evaluation)

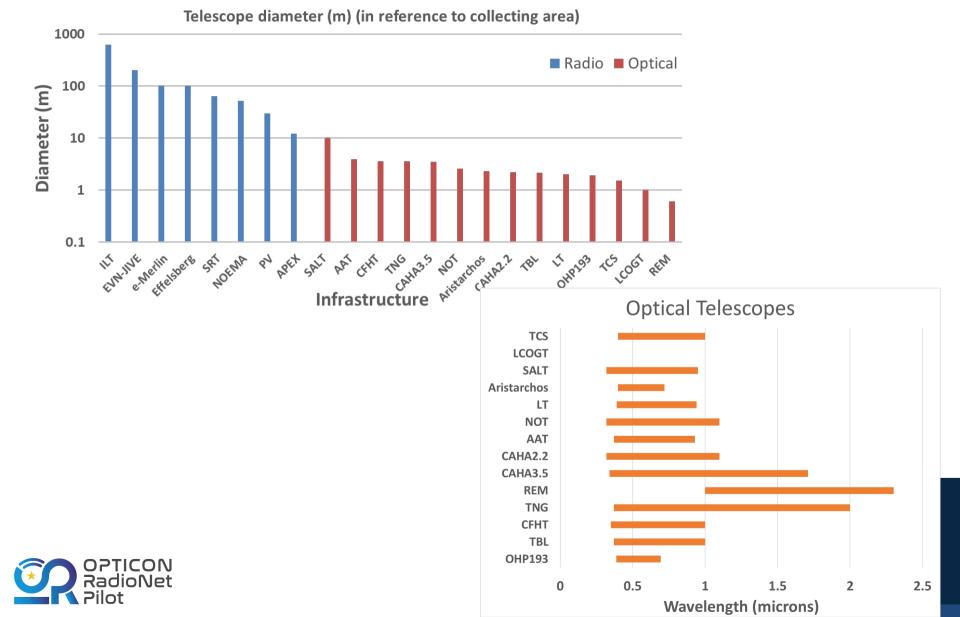


Transnational and Virtual Access

- Access to telescopes through a competitive, scientific-merit-based process. Eligibility criteria apply. All calls at <u>www.orp-h2020.eu/</u>
 - Radio: 8 Infrastructures ranging from sub-mm to metre wavelengths
 - 4 single dishes : APEX, IRAM-PV, SRT, Effelsberg
 - 4 interferometric arrays: e-MERLIN, NOEMA, EVN, LOFAR
 - Optical: 14 Infrastructures ranging from 60-cm to 10-m in diameter
 - REM, TCS, OHP, LT, TBL, CAHA-2.2, Aristarchos, NOT, CAHA-3.5, TNG, CFHT, AAT, SALT
 - LCO
- Other access: ARC (ALMA), VLTI centers, Canary (adaptive optics)
- Virtual access to archives : (LOFAR & WSRT) and Time-Domain Astronomy Central Coordination System (TDA-CCS)







Trans-National Access to optical telescopes

- Common Time Allocation Committee (CTAC). See last <u>CTAC report</u>
- Time is allocated based on scientific merit, independently of the telescope
- Cutoff line when the available budget for the semester is exhausted
- 2022A call: 22 proposals got time out of 52 submitted (42%)
- Oversubscription ~ 2.5 both in terms of number of proposals or budget

Telescope	N_{prop}	Requested time	Available time	Oversubscription
NOT	13	22.6n	10n	2.3
SALT	2	15hr	100hr	
TBL	0	0n	$7\mathrm{n}$	
OHP	1	10n	10n	
CFHT	6	3.7n	4n	
AAT	8	26.1n	20n	1.7
TCS	1	1.3n	14n	
TNG	9	12n	9n	1.2
LT	3	38h	50h	
LCO	12	313h	400h	
REM	3	120h	300h	
CAHA35	3	5.5n	10n	
CAHA22	3	9.5n	10n	
Aristarchos	0	0n	20n	

Topic	N _{prop}	$\mathrm{N}_{\mathrm{success}}$	Success rate
Solar System	3	1	33%
Exoplanets	12	5	42%
Stars and stellar population	14	3	21%
CSM and star formation	2	1	50%
Low-z Universe	2	1	50%
High-z Universe	4	3	75%
Time Domain Astronomy	15	8	53%



Trans-National Access to radio telescopes

- Time and support allocated by the TAC of each infrastructure
- Through the fraction of 'open-sky' time available at each infrastructure, ranging from 10 to 100%
- Pre-allocation of time / users / projects for each infrastructure

Infrastructure	Access Unit	Access	Users	Projects
EVN-JIVE	hours	1073	200	70
e-MERLIN	hours	614	100	70
NOEMA	hours	179	80	20
PV	hours	655	120	30
LOFAR	hours	1261	200	20
Effelsberg	hours	600	40	16
APEX	hours	125	40	8
SRT	hours	200	200	35



Other Trans-national access

- VLTI center(s)
 - VLTI Expertise Centers (Grenoble, Lisbon, Exeter, Leiden, Leuven, Konkoly)
 - Enhanced data access for GRAVITY
 - Support access and observations with the *Hi-5/VIKING* instrument





- CANARY
 - Adaptive Optics Testbed (WHT)





Joint Activities

- Strategy (long-term sustainability of the access programme)
- Harmonized services and tools
 - Common Access to Research Infrastructures (proposal tool)
 - Time-Domain, Multi-Facility & Multi-Frequency access to Infrastructures and data
 - Synergies between interferometric communities
 - Preserving the sky for future generations
- Targeted technical developments (continuation of previous Joint Research Activities)
 - Volume Phase Holographic Gratings (VPHGs)
 - Enhancing the Capabilities of VLTI & Interferometric image reconstruction algorithms
 - Adaptive Optics
- Training
 - > 1000 trainees since Y2000





Password forgotten?



Send Questions



Virtual Access

- Time-Domain Astronomy Central Coordination System (TDA-CCS)
- Lofar Long Term Archive (LTA)
- WSRT-APERTIF Long Term Archive (ALTA)





Apertif Long Term Archive



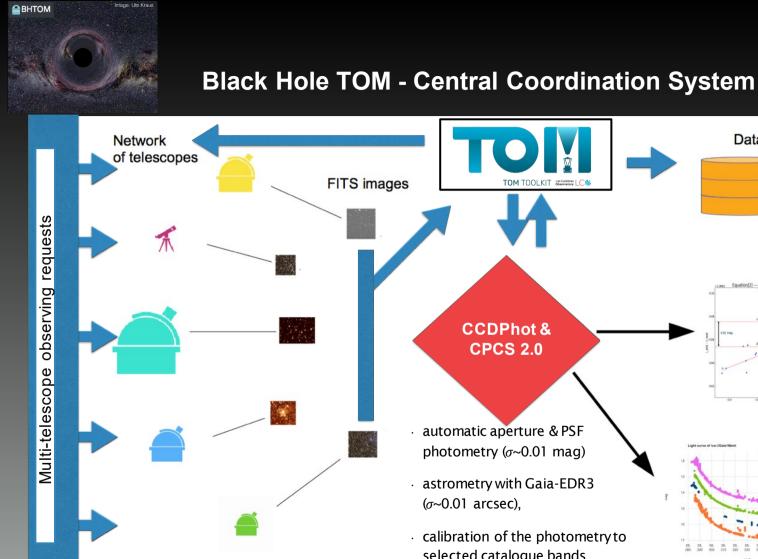
Black Hole TOM - users & numbers



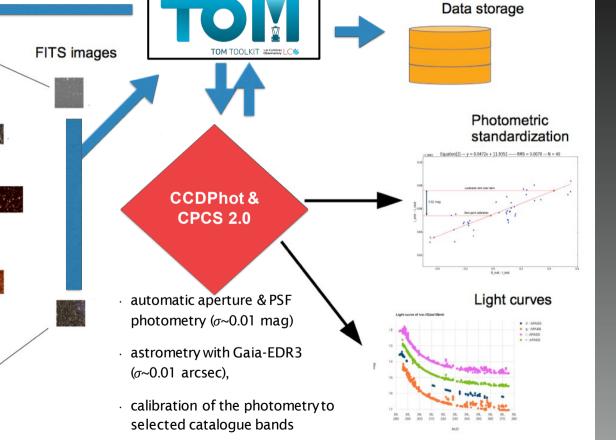
- ORP TDA network of small- and mid-sized telescopes (< 2 m)
- 61 users (professional and amatuer observers) registered
- 40 telescopes/instruments registered

ACTIVE TELESCOPES:

Bialkow60, Ostrowik60, Suhora60, Jena90-STK, VATT183, LCO 1m (SidingSpring, CTIO, SAAO, McDonald), LCO 2m (SidingSpring, Haleakala) Moletai35-Maksutov, Moletai165, Wien80, Loiano152, OACatania91, IAC80-Camelot, OHP120, REM60, SMARTS130, ROAD40, Konkoly90, Solaris1, PST70, Terskol200, Lowell110, TJO80, IAC80, HortenAO68, Astrolab-IRIS, Flarestar40, Warrumbungle51, TRT-GAO70. Aristarchos230, PROMPT6







Conclusion

- Access to a network of 20+ optical and radio telescopes (including radio interferometers)
- Access to expertise centers and archives
- Development of common and harmonized tools for access to telescopes and data: multi-wavelength, multi-infrastructures and time-domain.

