

#### **OPTICON RadioNet Pilot** *Project Overview & Status*

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#### On behalf of the ORP consortium





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# ORP is 20 years of success leading to the fusion of RadioNet and OPTICON

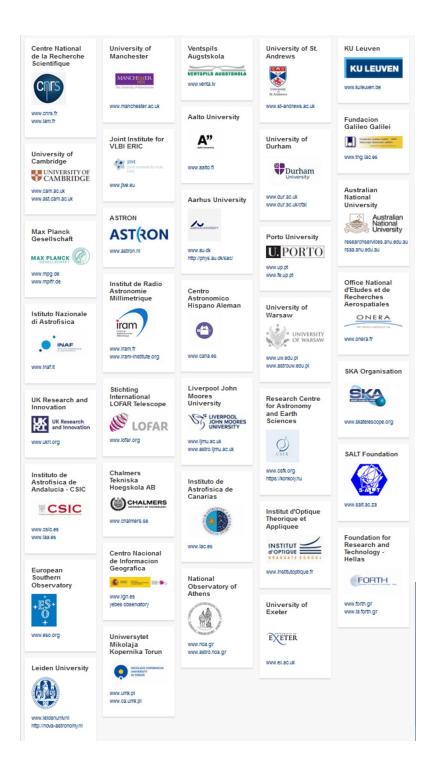
ORP is partnership of 37 leading organisations

Coordination CNRS (UCAM, MPG)

15 M€/ 4 years Started on 1<sup>st</sup> March 2021

3 Pillars: T(N)A/VA, Performance, Policy





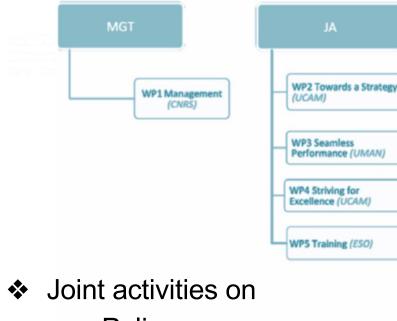
### The ORP main commitments

A Pilot at the service of its community to facilitate astrophysical discoveries by:

- Providing access to an integrated set of research infrastructures;
- Harmonising procedures to allow scientists to access all of these facilities via common tools for observation request and specification with a single access point, single sign-on entry;
- Developing on-line services to improve proposal preparation, submission and review, feedback on submitted proposals, time allocation and scheduling, detailed observation specification and execution, etc.;
- Improving user support for optical and radio interferometers and bringing together a number of targeted developments for optical telescopes and interferometers;
- Mapping and analysing access modalities in order to develop models for longterm engagement of funders.



## All the Work-Packages



- Policy.
- Harmonisation of services.
- Training.
- No technical developments!

Transnational Access
WP6 EVN (JIV-ERIC)
WP7 e-MERLIN (UMAN)
WP8 IRAM (IRAM)
WP9 LOFAR (ILT)
WP10 Effelsberg (MPG)
WP11 APEX (OSO)
WP12 SRT (INAF)
WP13 ARC Nodes (ESO)
WP15 Optical TA (UKRI)
WP16 VLTI Support (CNRS)
WP17 VLTI Expertise Centres (UPORTO)
WP19 CANARY testbed

	P14 ADA (NI TRON)	WO-1	
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- TA classical access to optical telescopes, radio dishes and arrays.
- TA to centres of expertise of ALMA and VLTI.
- TA for instrumentation of adaptive optics and VLTI.
- ✤ VA to radio archives.
- ✤ VA to TDA optical/IR.



# <image>

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# Strategic planning

- Strategic vision of the relation between Astronomical Research Infrastructures & EC.
- Models for the post-Pilot futures of our communities.
- Sustainable transnational access (beyond EU funding).
- Common policy for a dark and quite sky.
- Equality, Diversity and Inclusion (EDI) for users.













#### Seamless & Excellence Performance

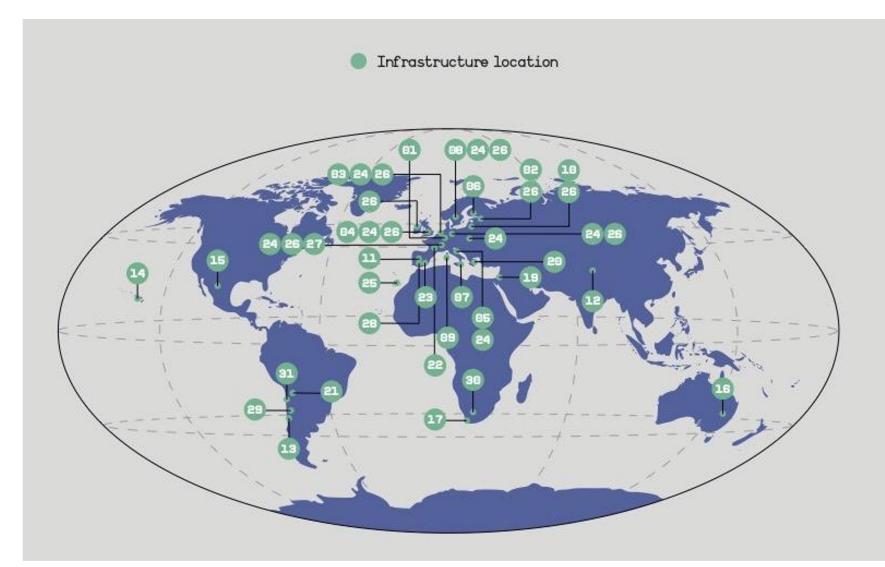
- Common Access Tools
  - Proposal submission tool.
  - Harmonised procedure.
  - Multi-facilities coordinated calls.
  - Multi-wavelength astronomy (e.g. Time Domain).
- Training
  - Sharing analysis expertise & broaden astrophysical skills.
  - Flagship events (NEON and ERIS).
  - Proposal writing, archival, instrumentation and multi-wavelength/messenger schools.
  - Gender/geographical/career distribution.





## **Transnational and Virtual Access**

- Transnational Access to 24 infrastructures:
  - 0.4m-10m optical telescopes (CFHT, OHP, TBL, TNG, REM, CAHA, NOT, LT, Aristachos, LCOGT, TCS, SALT).
  - The biggest radio dishes (100m Effelsberg, SRT, PV, APEX).
  - World class radio arrays (EVN, LOFAR, NOEMA, eMERLIN).
  - Instrumental support (Adaptive Optics CANARY).
  - User support (VLTI & ALMA Centres).
  - Virtual Access to
    - Long term data archives (LOFAR & WSRT).
    - Time-domain (63 ==> 100 small/medium-sized optical and IR telescopes).



- ✤ All wavelengths from radio to visible/infrared covered.
- Facilities on the whole Earth.



## **ORP** Transnational Access

- Classical TA:
  - Two different methods for time allocation:
    - One Common Time Allocation Committee (CTAC) for optical facilities.
    - Individual TAC for each radio facility.
  - Access upon a competitive, scientific-excellence-based process
  - Oversubscription (topics on MMA and TDA).
  - Expertise TA:
    - ALMA/VLTI centres across Europe (==> Gerry's talk).
  - Instrumental TA:
    - Adaptive Optics/VLTI.

 $\Rightarrow$  The TA calls and services are published on the ORP website.



#### **ORP Virtual Access**

#### Virtual Access:

- No selection, direct access to archive places: independent from ORP.
- Open access to radio archives WSRT & LOFAR:
  - No registration needed.
  - Statistic based on IP address.
- Open access to TDA:
  - Registration for users requesting observations or download



## What about MMA and TDA in ORP?

- ORP is already a collaborative optical-radio approach towards:
  - Common-access to Research infrastructures: a common observing Proposal Submission Tool (PST) for deployment at any ORP facility.
  - Time-Domain, Multi-Facility & Multi-Frequency access to Research infrastructures: a centralised system to conduct multi-facility, multiwavelength time domain astronomy (based on tools developed by the Las Cumbres Observatory).
  - VA: Time-Domain Astronomy Central Coordination System (TDA- CCS): a common photometric pipeline (BHTOM).
- ORP already provides services for MMA/TDA observations.





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HOME ABOUT ~ TA & VA ~ SERVICES ~ NEWS EVENTS RESOURCES INTERNAL Q

#### THANK YOU !

The Opticon RadioNet Pilot brings together the well-established ground-based astronomy community to offer, support and develop access to radio and optical facilities in an efficient, co-ordinated and future-looking programme.

# www.orp-h2020.eu

