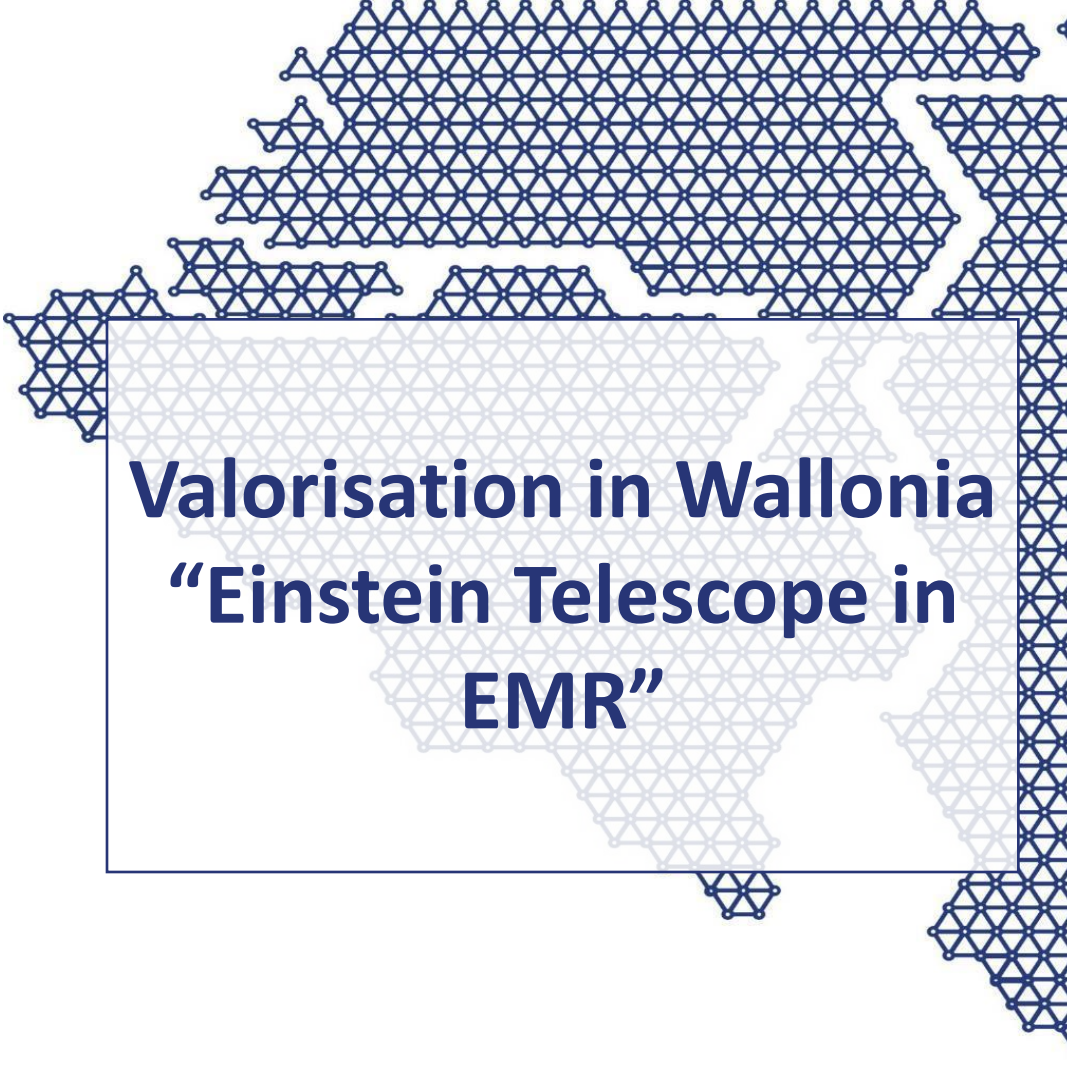




Einstein
Telescope

/ NL / BE / DE /



Valorisation in Wallonia
“Einstein Telescope in
EMR”

Einstein Telescope valorisation process in Wallonia

- A process lead by GRE Liège, ULiège, Wallonie Entreprendre and with the support of:
- 4 regional Clusters ready to join forces to meet the challenges of ET :
 - Skywin
 - Pole Mecatech
 - Logistics In Wallonia
 - Greenwin
- In total, more than 1 000 players involved in these 4 Clusters (SMEs, Large Companies, Research Centers, Universities)
 - +/- 112 companies (SME, LC, RC) in Wallonie & Brussels are already present in the W-B « ET database ».



Einstein Telescope valorisation process in Wallonia

- ET Infrastructure => Greenwin  + Logistics in Wallonia



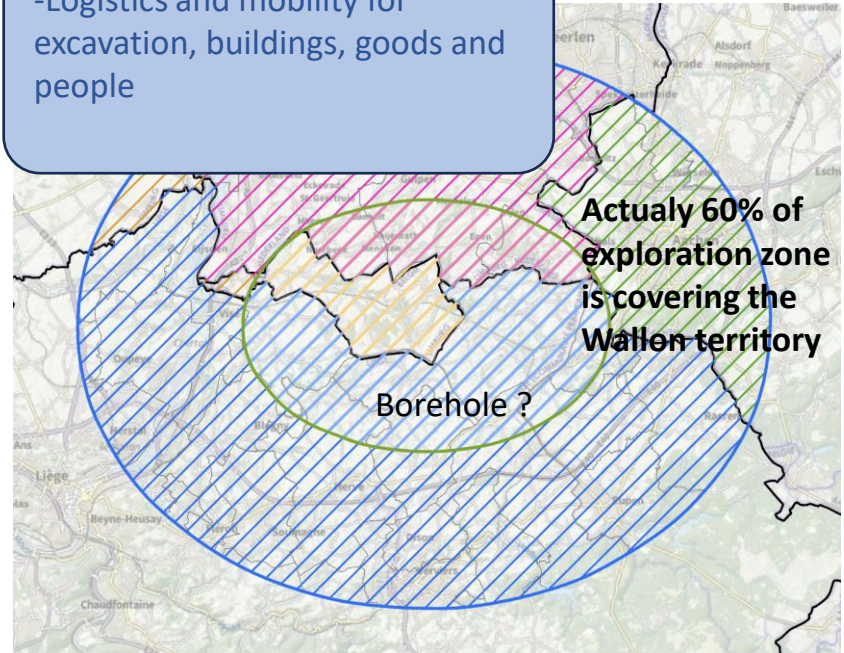
- Tunneling, Water Technologies
- Eco building processes
- valorisation of excavated materials / ressources
- Sustainable Energy

- Logistics and mobility for excavation, buildings, goods and people

Around 30 actors identified up to now



Targeted strategic technologies to be defined (after stabilisation of localisation and geological interrogations !)



Einstein Telescope valorisation process in Wallonia

- ET Instrument => Skywin  + Pôle Mecatech 
- Targeted technologies in Wallonia
 - Precision mechanics
 - Vibration isolation using passive and active technologies for heavy mirrors.
 - Sensors
 - Vibration sensors (high-precision and cryo-compatible)
 - Cryo
 - Vibration-free and non-contact cooling systems for mirrors up to a temperature of 10-20K.
 - Mirrors
 - Coating development, deformation monitoring, development of large Si mirrors
 - Ultra High Vacuum
 - Contamination on optical instruments, vacuum technology including cryo pumping.
 - Algorithms
 - to simulate, control and monitor the interferometers, Cybersecurity and Artificial intelligence.



Einstein Telescope valorisation process in Wallonia

- ET Instrument => Skywin



+ Pôle Mecatech



- Around 80 actors addressing ET Instrument technologies in Wallonia
- Some major players have already shown an interest :



Plasma
Technology
Solutions



DELTA TEC



KARL
HUGO
MECHANICAL
ENGINEERING



EHP

LAMBDA-X | HIGH TECH |

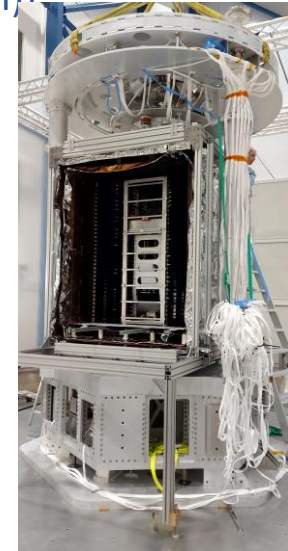
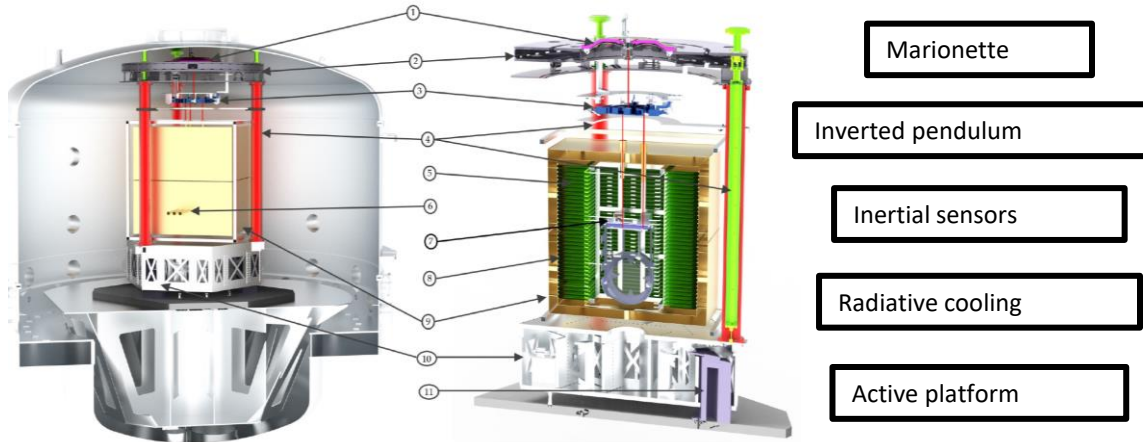


BEBLUE



Einstein Telescope valorisation process in Wallonia

- **ET Instrument** => Focus on **E-TEST : a permanent « ET test facilities » in Belgium** (Cryo, Vacuum, Precision mechanics, Mirror + coating, Sensors, Algorithmm)



Einstein Telescope valorisation process in Wallonia

Skywin and Pole Mecatech will open their next calls (43 & 44) for projects to specific collaborations relating to ET instruments.

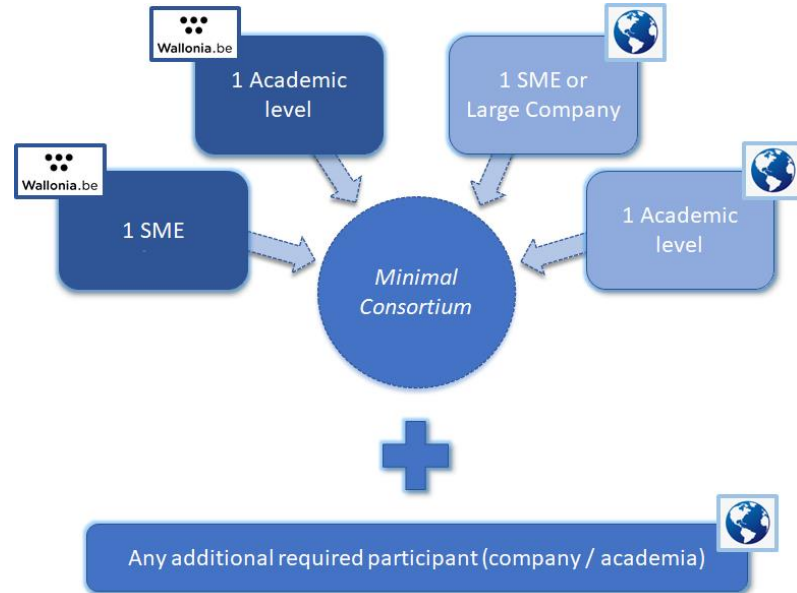
- Agenda :
 - 2 Webinars to present the challenges of ET technologies to industry and research bodies
 - Week 17 (23 or 25 April) 2024 « **ET Vibration & Cryo** »
 - Week 20 (14 or 16 May) 2024 « **ET Mirrors, Vacuum & Algorhythm** »
 - Call 43 : Letter of Intent in end of June 2024
 - Call 44 : Letter of Intent in September 2024
- Consortium :
 - Min 2 companies and 2 RC/University dept.
 - Average project budget : 3MEuros
 - Average duration : 2-3 years



Einstein Telescope valorisation process in Wallonia

International / regional consortium for a R&D project

- Minimum : 1 Walloon company (SME) + 1 International / regional company
- Minimum : 1 Walloon University/Research Center + 1 International / regional University/Research Center
- *International / regional partners will not be funded by Walloon government*



Einstein Telescope valorisation process in Wallonia

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