



OSCARS

Open Science Clusters' Action
for Research & Society

Funded Project

UpGLADE

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What problem(s) are you going to solve?

- **Hubble tension:** how fast is the Universe expanding?
 - Disagreement between different results
 - **Gravitational waves** provide an independent way to decide the question
 - Bottleneck: **galaxy catalogue** data...
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What are you planning to do to solve the problem?

- Building the **UpGLADE Galaxy Catalogue**: the most complete open-access all-sky galaxy database to date
 - Modern, queryable database with high-throughput capabilities and API access
 - Integrating it with existing tools and Virtual Observatory standards
 - Upgrade **GLADenet** into an interactive community-driven platform for collaborative data curation
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What will be the results and how do you plan to make them available to the broader community?

- Enable the most accurate GW measurement of the Hubble constant to date, advancing **GW cosmology**
 - Strengthen **multi-messenger astronomy**, supporting applications beyond cosmology
 - Creating a living, evolving resource that grows with **community engagement**: astronomers from large facilities to small observatories, as well as citizen scientists, will be able to actively improve catalogue coverage and data quality
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Who is doing it?



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