

# Funded Project

## The Astronomy Dark Matter Test Science Project

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Implemented by







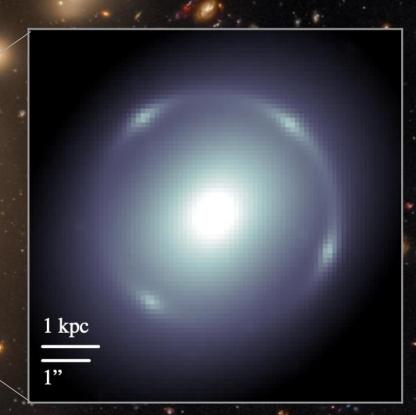
### **CHALLENGE ADDRESSED**

What problem(s) are you going to solve?

Dark matter: perhaps the most pressing unknown in fundamental physics

All dark matter evidence is from astronomy

Lack of shared tools or services for astronomers to interpret high-energy and astroparticle dark matter detection experiments, & vice versa



#### **SOLUTION**



Documentation: Astronomers' guide to DM direct detection



Advanced tools for gravitational lensing with Euclid and Vera C Rubin Observatory





All underpinned by ESCAPE services ensuring FAIR principles







#### **RESULTS**

OBSERVATORY



What will be the results and how do you plan to make them available to the broader community?





#### **RISKS**

Euclid already taking data and Rubin already part-way through successful commissioning

Euclid/Rubin strong lens hyperspectral deblending could in principle be challenging but we have an excellent proof of concept











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