

Group Overview



SALT

Stellar Afterlife and Transients Group

John Antoniadis
ΛISA in Greece workshop



Who are we?

Stellar Afterlife and Transients Team

Faculty

John Antoniadis

Postdocs

David Aguilera Dena

PhD candidates

Savvas Chanlaridis

Tilemachos Athanasiadis (MPIfR)

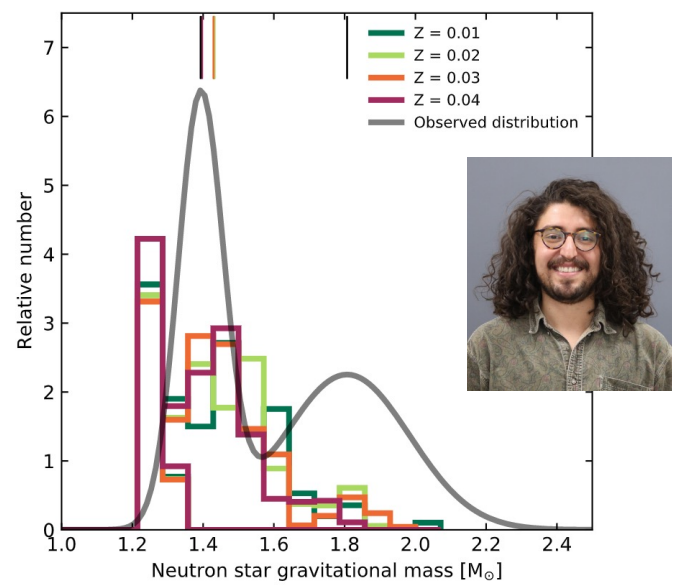
(f) Lauren Rhodes (Oxford/MPIfR)

+MSc & BSc students

Merging binaries and their properties

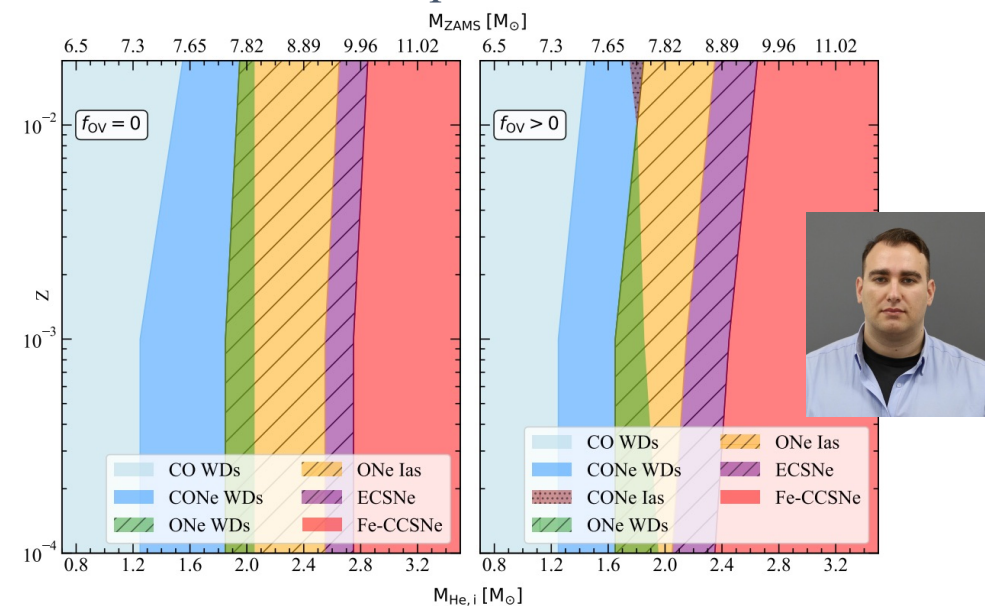
Supernovae and compact objects across cosmic time

Core-collapse SN models NS/BH mass distributions



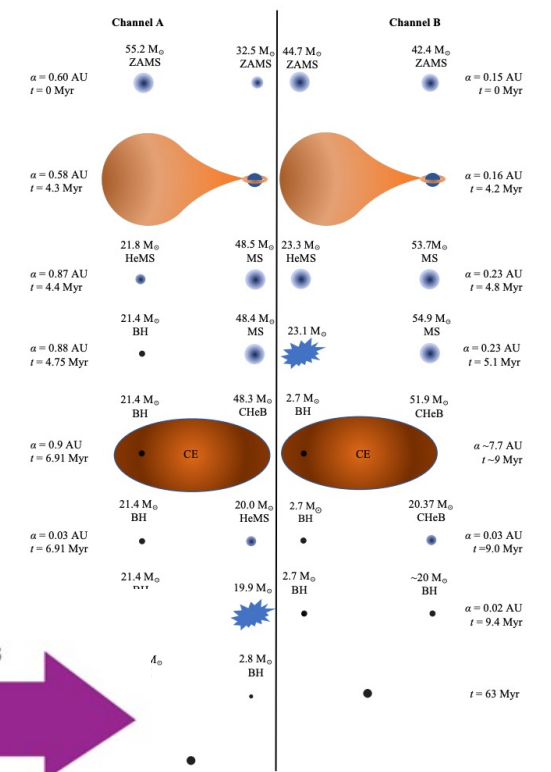
ArXiv:2008.09132,
2106.12381,
2106.09909,
2112.06948

e-capture SNe



ArXiv:2201.00871

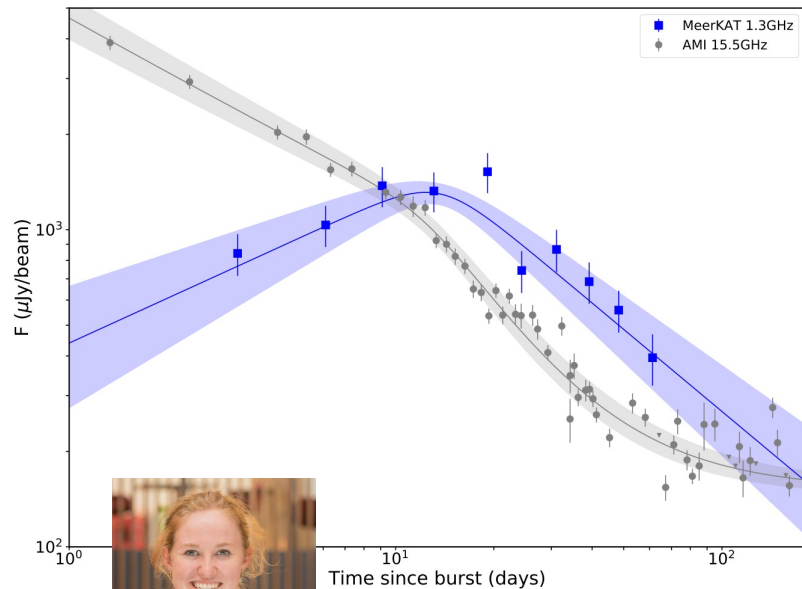
Formation of BH/NS binaries



ArXiv:2110.01393

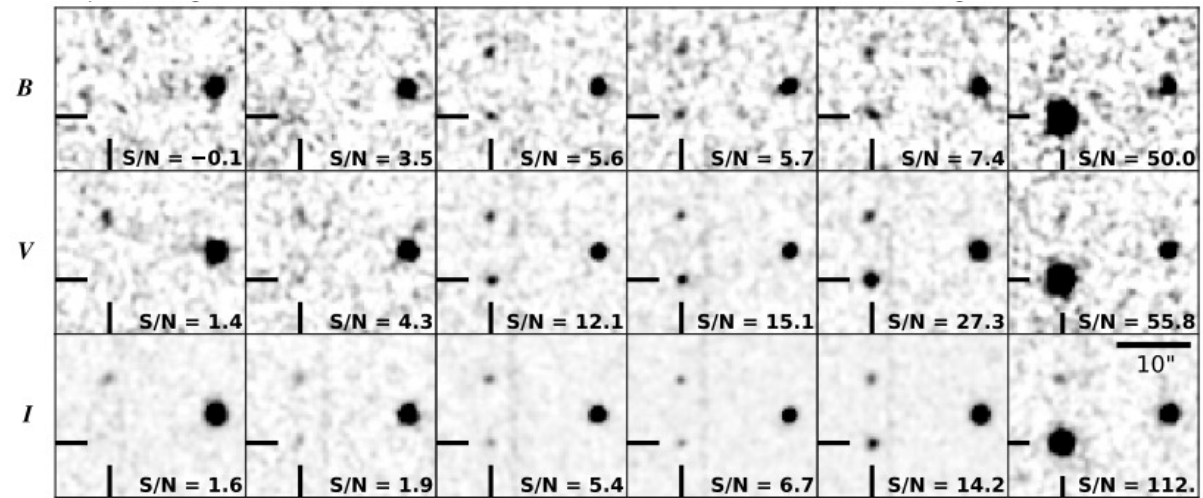


Radio Afterglows of Very High Energy Gamma-Ray Bursts 180720B and 190829A

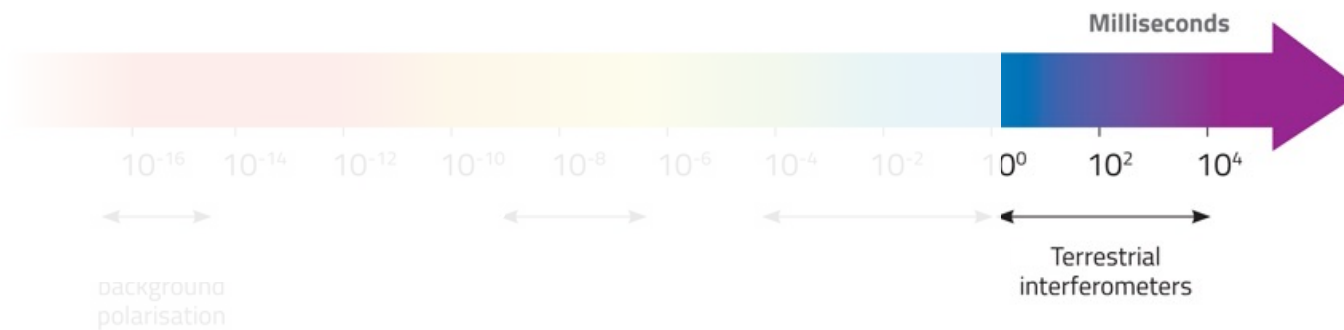


ArXiv: 2004.01538

KMTNet Supernova Program Earliest detection of a Type Ia SN (1h after explosion)



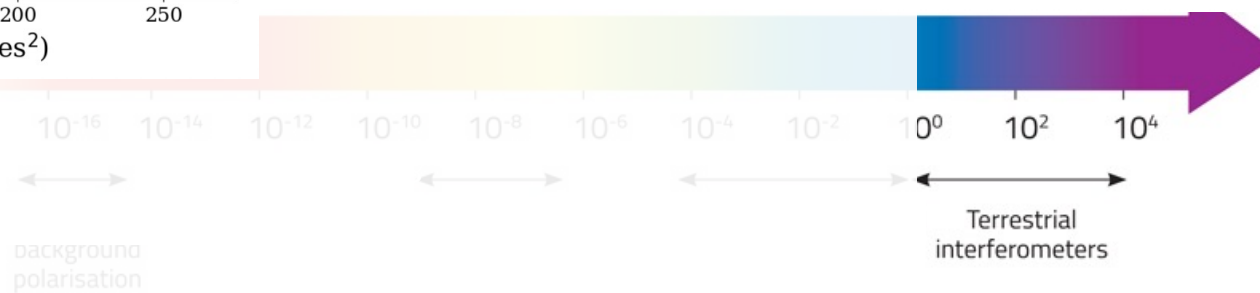
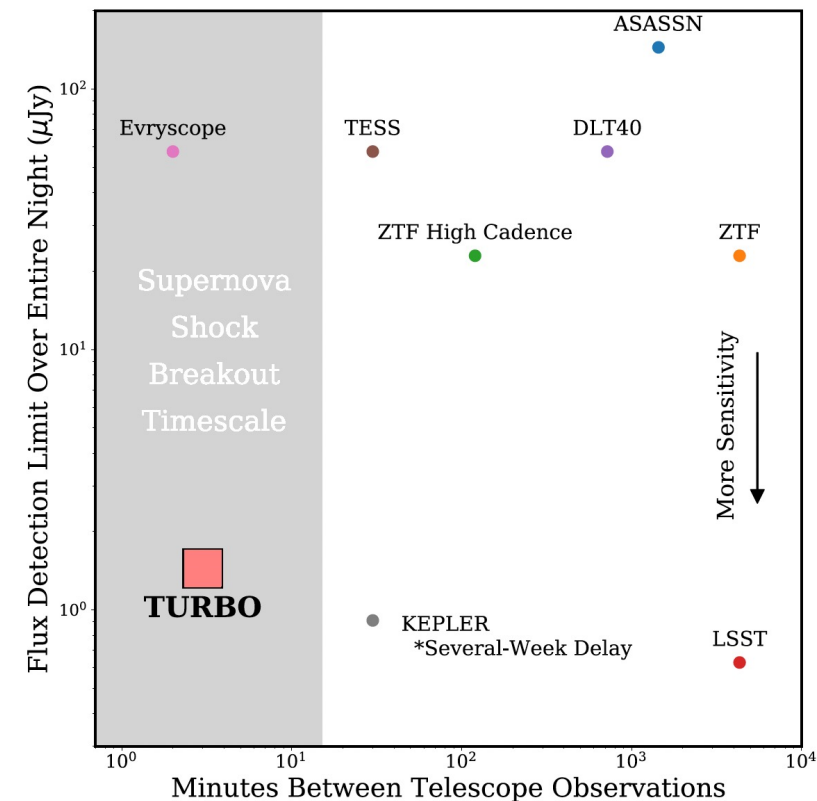
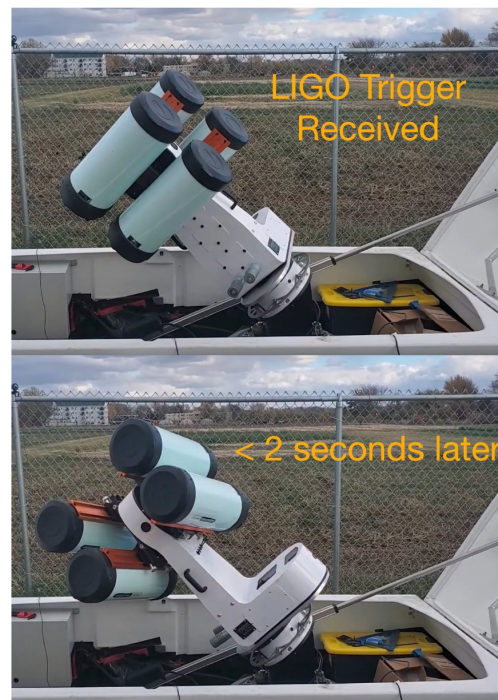
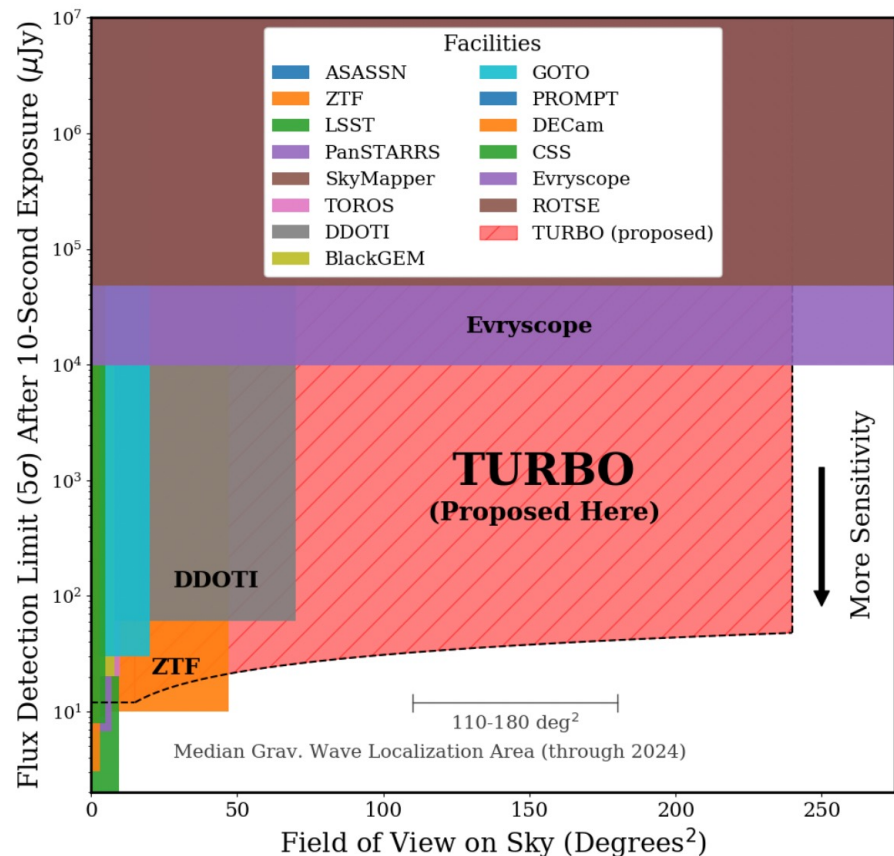
Ni et al., Nature Astronomy, *in press*





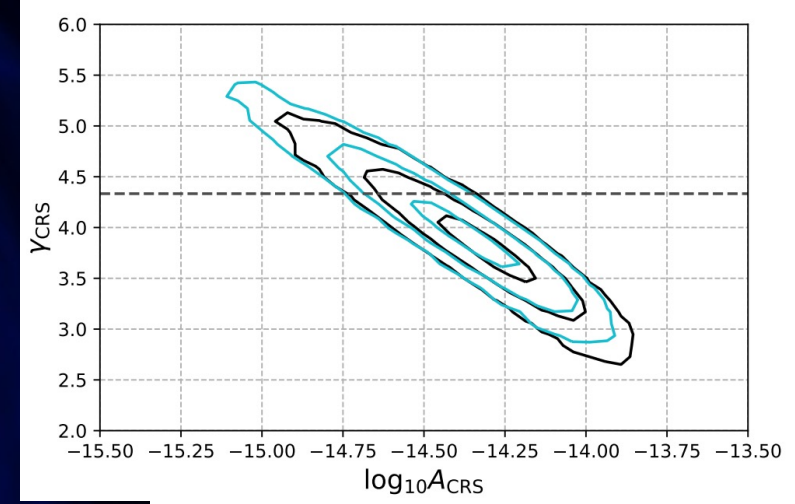
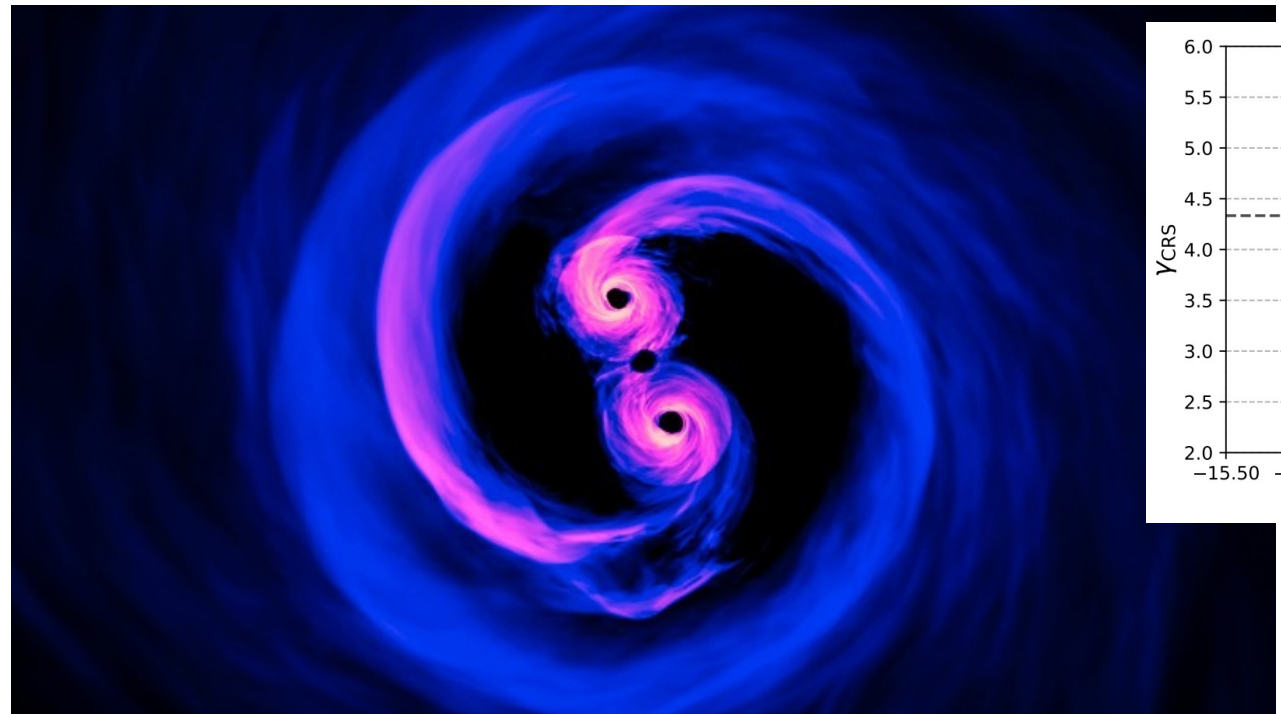
Total-Coverage Ultra-Fast Response to Binary-Mergers Observatory (TURBO)

(fully funded; PI: Pat Kelly, Uni Minnesota), first light at Skinakas during O4

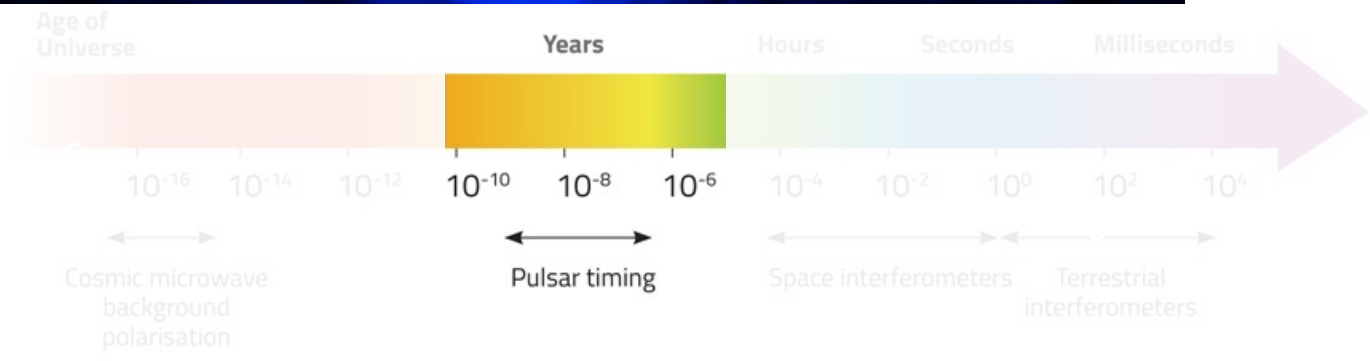




Pulsar Timing Arrays and nHz Gravitational Waves

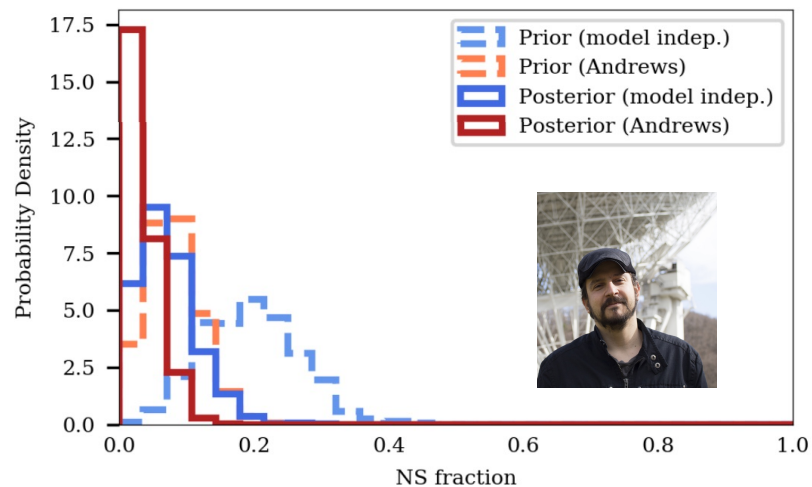


ArXiv: 2110.13184
2111.05186
2201.03980



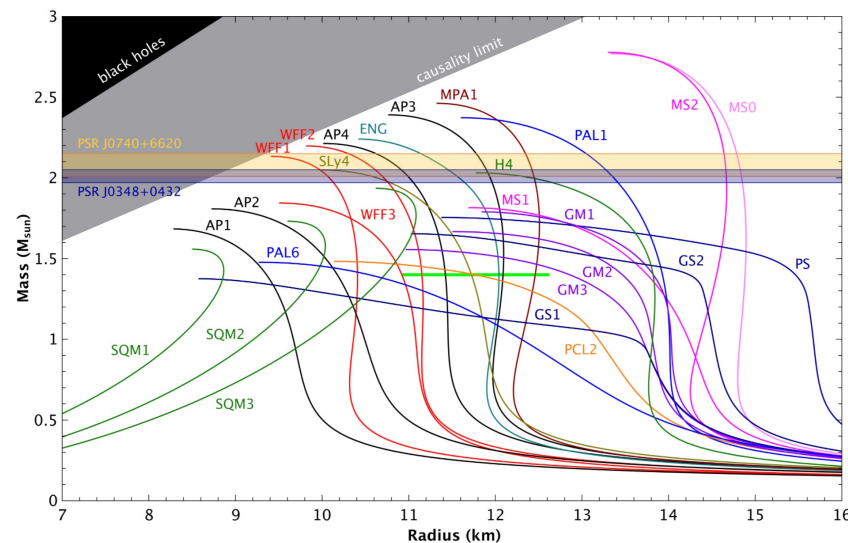
European Pulsar Interior Composition (EPIC) Survey

Targeted searches for relativistic binaries

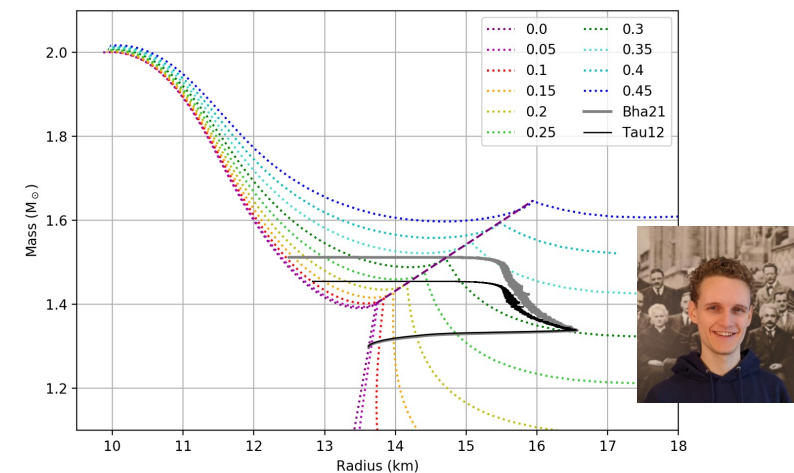


ArXiv: 2011.08075,
2012.06335,
2105.13712,
2112.02914,

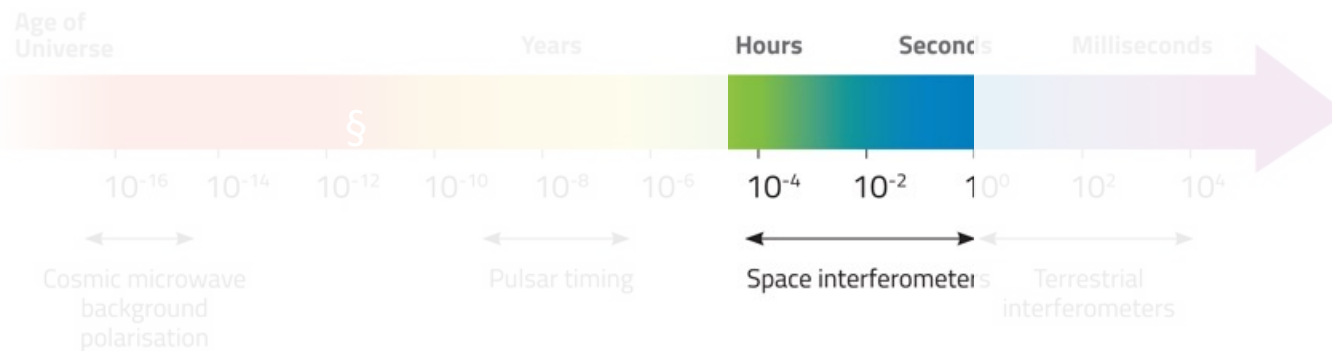
NS mass measurements and fundamental physics



Hybrid compact stars and astrophysical implications



ArXiv: 2012.08782



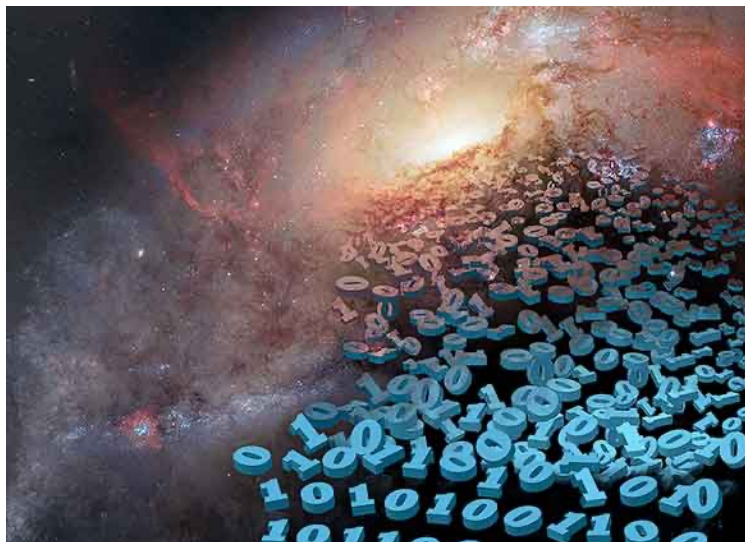


Other Space activities at FORTH

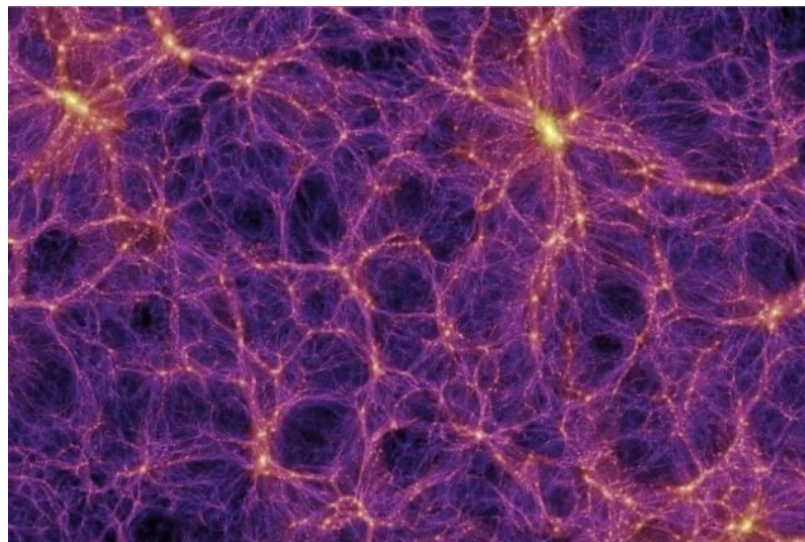


Existing Synergies with FORTH-IA

Institute of Applied & Computational
Mathematics
Data Science & Modeling Labs



Institute of Compute Science
Signal Processing Lab



Institute of Electronic Structure and
Laser (see talk by Wolf)

