

ERIK WESSEL

$z = 0.0$

SCALE 22X

COSMOLOGY

NUMERICAL RELATIVITY

- Deep mathematical questions about universe at the largest scales
- Numerical relativity essential for some questions
- Still a nascent technique in the field

500 Mpc

Adapted from Macpherson, Price, Lasky, 2019

EXOTIC OBJECTS NUMERICAL RELATIVITY

- Ultra-light bosons / dark matter
- Testing modifications to general relativity
- Black hole mimickers

Adapted from Richards, et. al. 2015