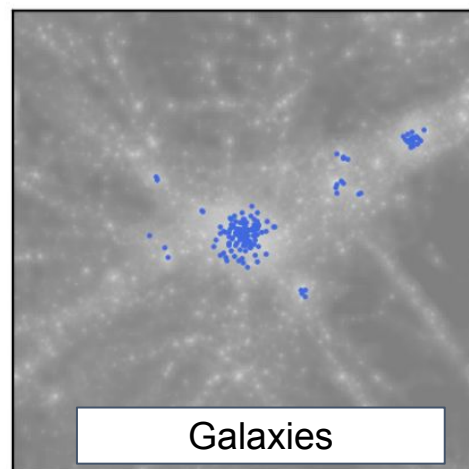
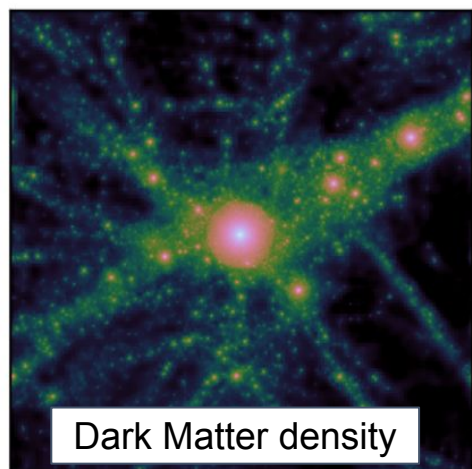


Topic XY: Accelerating models of the connection of dark matter and galaxies with AI



Asgari+ (2023)

We can predict the **spatial distribution of galaxies within the dark matter distribution** and their properties with so-called **halo models**. But these models are **computationally expensive and too slow for upcoming surveys**.

In this project you will use **machine learning methods** to accelerate the modelling with **neural-network-based emulators**.

Requirements: some python experience, experience with AI and (extragalactic) astrophysics welcome

