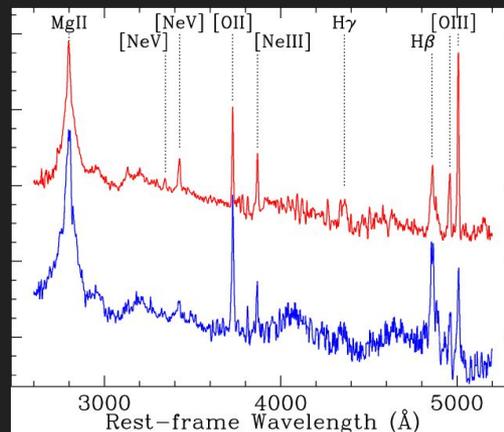
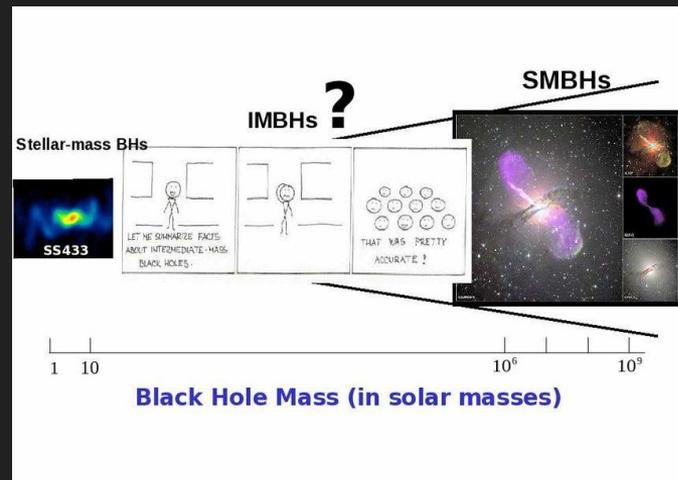


Improving Environmental Modeling of Gas and Dust to Identify IMBHs

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- Current substantial knowledge gap in formation and fate of intermediate-mass black holes
 - May serve to bridge our understanding of stellar-mass and supermassive black holes as well
- To understand IMBHs, they first need to be identifiable
 - Current simulations heavily simplify physics and chemistry of gas and dust
- Creating and implementing metallicity-dependent, self-consistent prescription for grain depletion, sublimation, and relationship scaling
 - Realistic spectra predictions to better identify IMBHs
 - What features of these spectra could be useful (coronal lines?)



Sample type 1
AGN spectra
(Vignali et al.
2013)