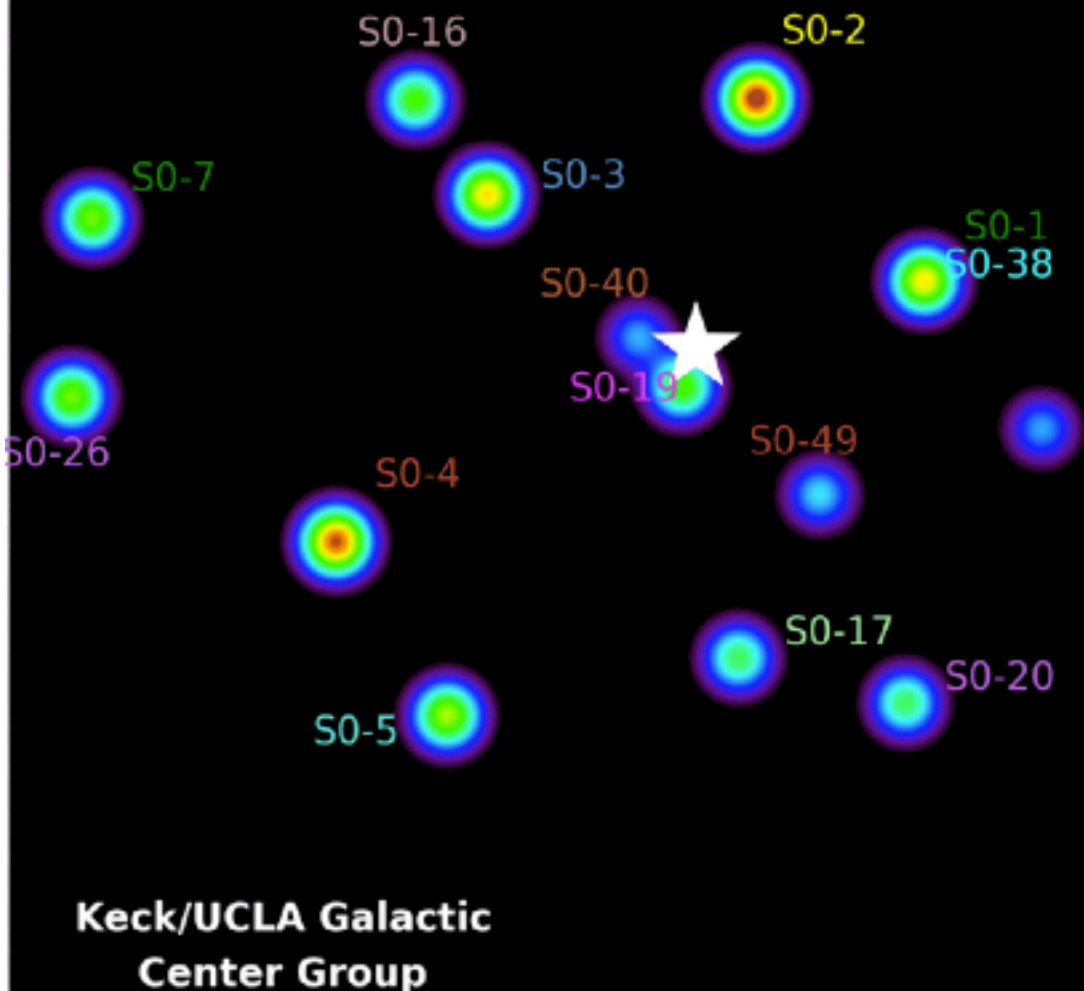
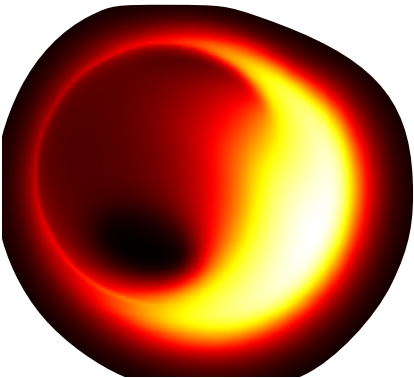
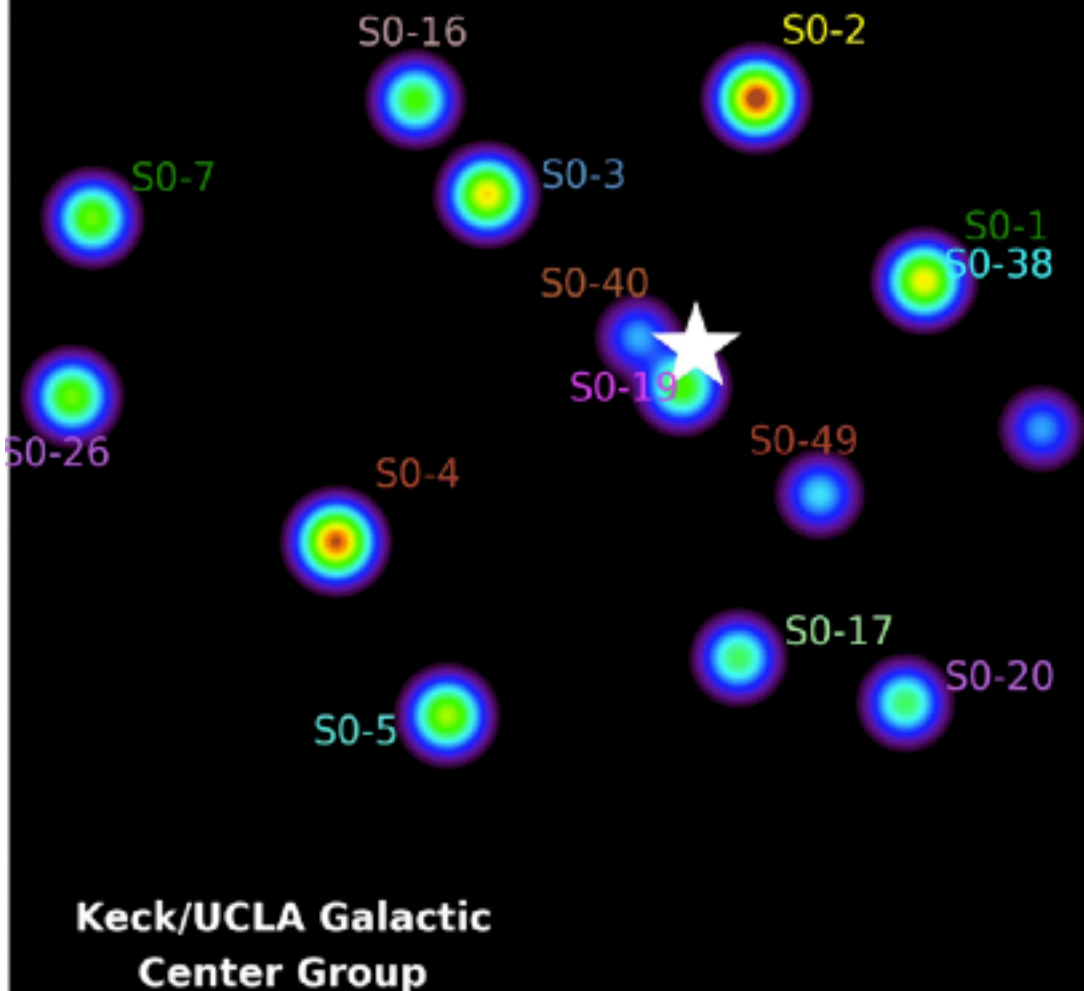


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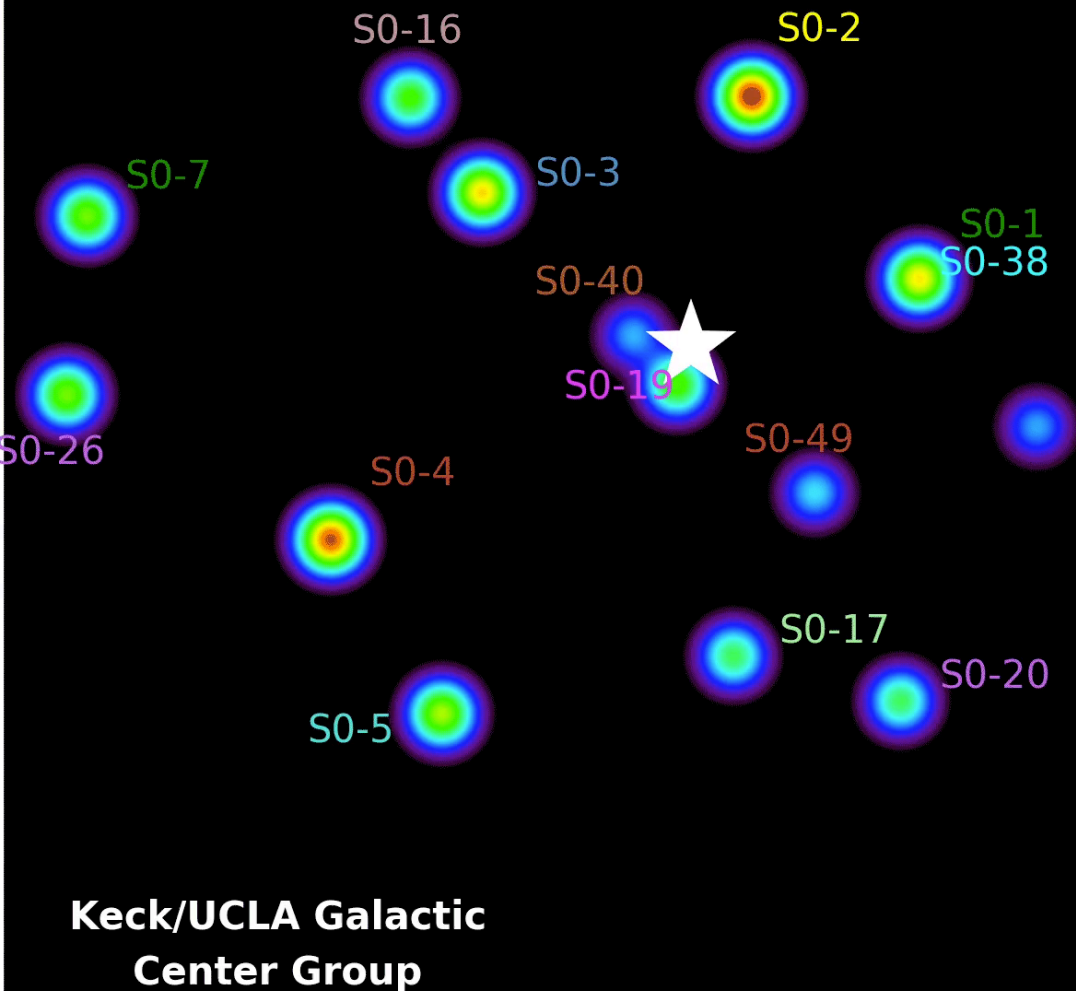




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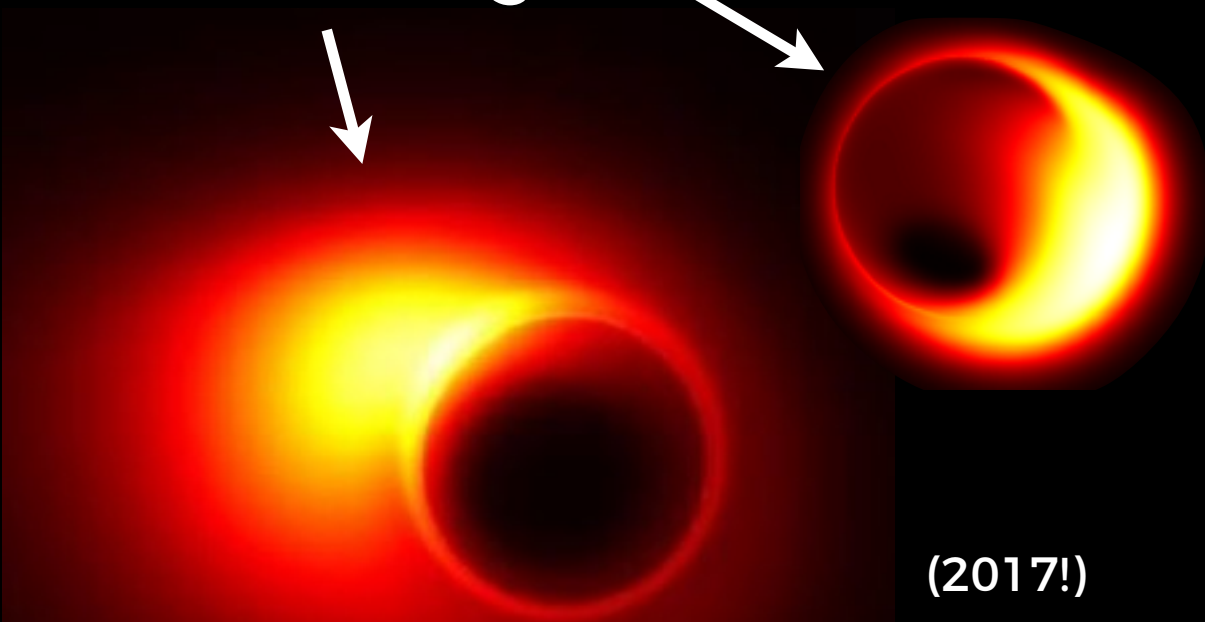


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1995.5

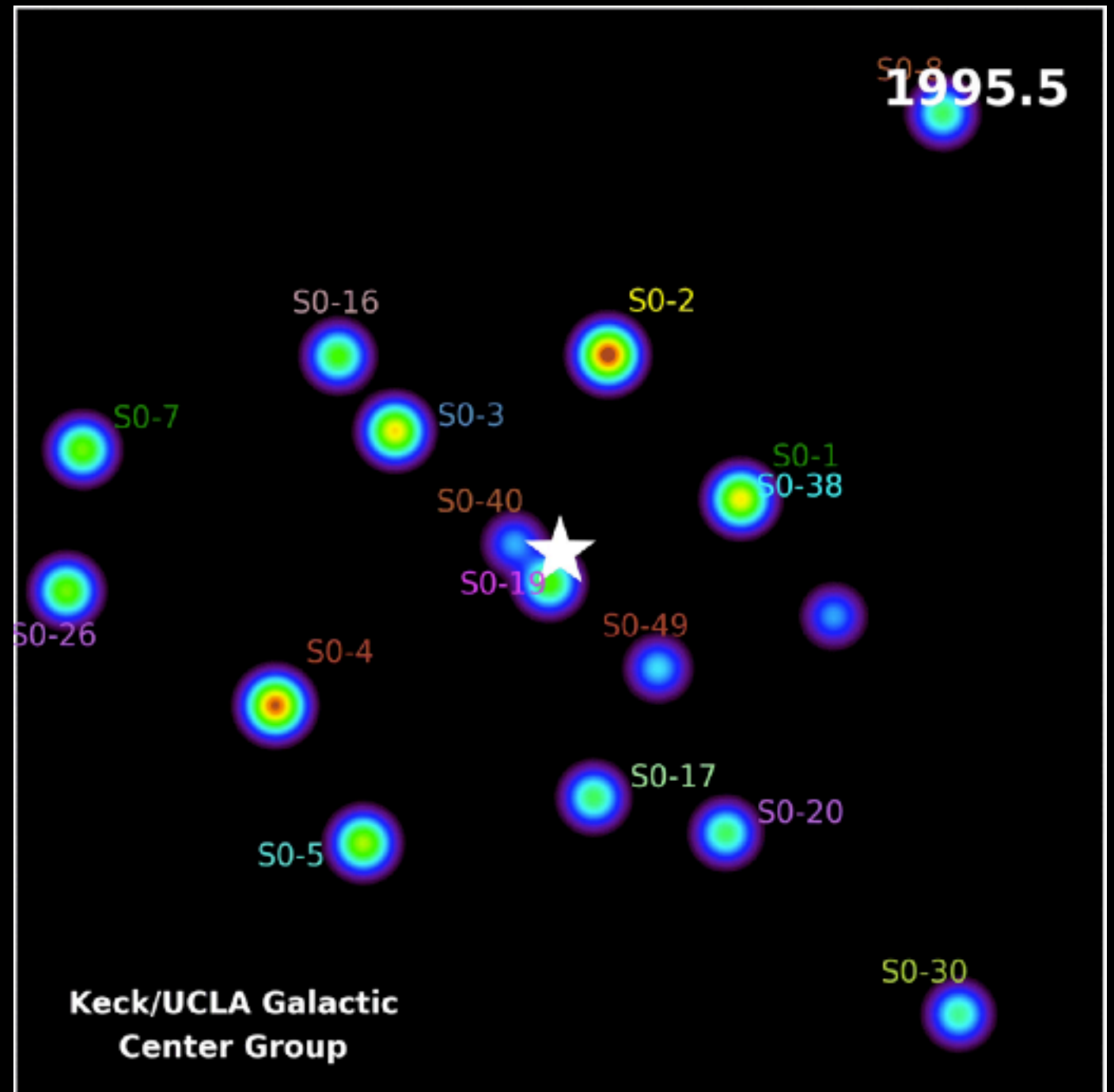


The importance of black holes

- ▶ Highly energetic
 - ▶ Quasars
 - ▶ GRBs
- ▶ Feedback into environment
 - ▶ Galaxy evolution
 - ▶ Large-scale structure
- ▶ EHT
 - ▶ Image black holes
 - ▶ M87, Sgr A*



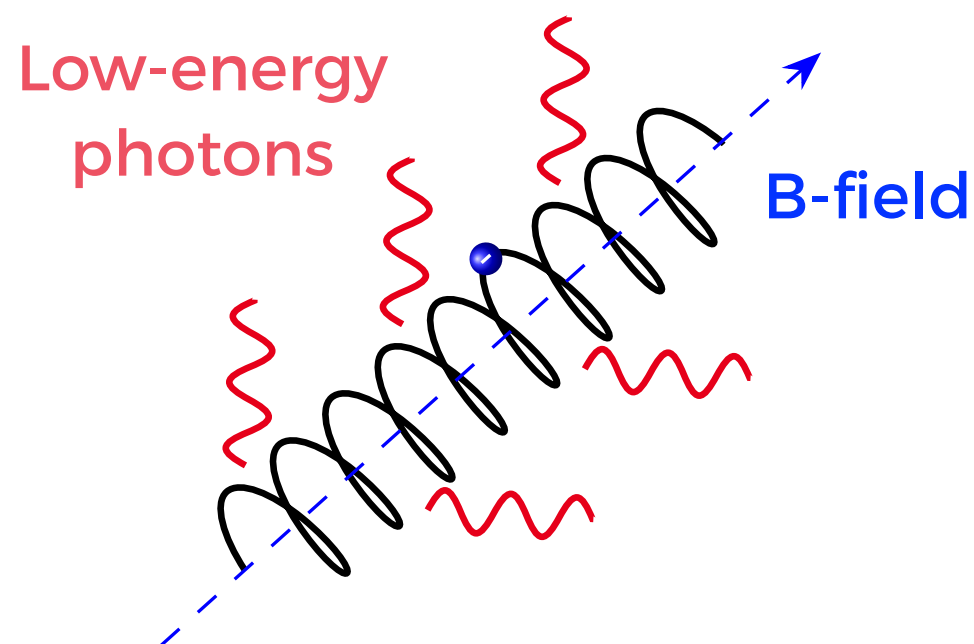
Credit: A. E. Broderick



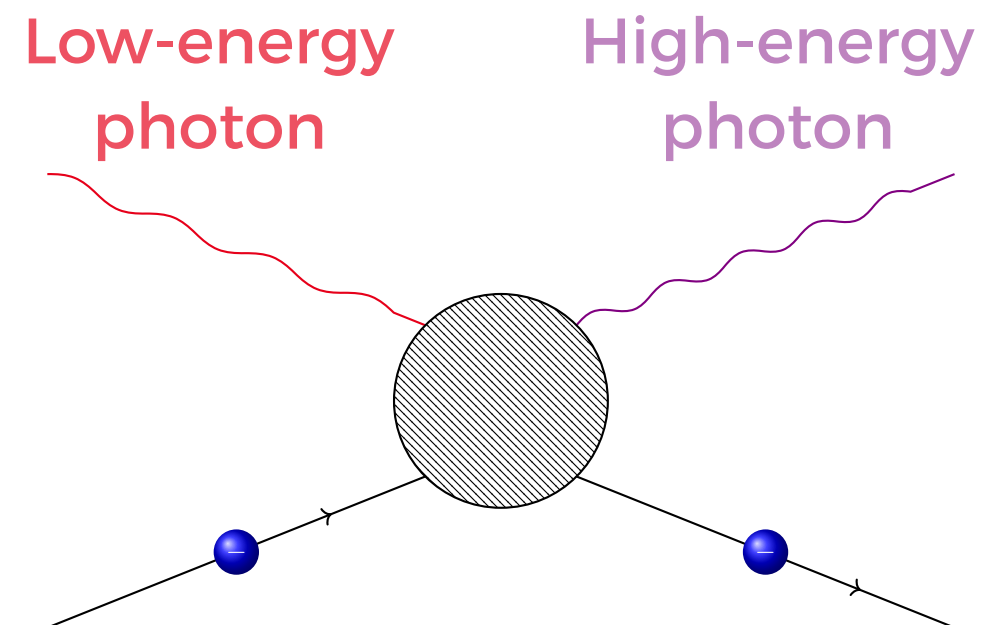
Electrons in accretion disk make radiation

Energetic electrons can produce radiation through various processes:

Synchrotron



Inverse Compton



Electrons are responsible for observed radiation profiles, yet the production of energetic electrons is **unresolved** in global simulations