

David Rupke



Rhodes College

rupked@rhodes.edu

901-402-1797

Rhodes

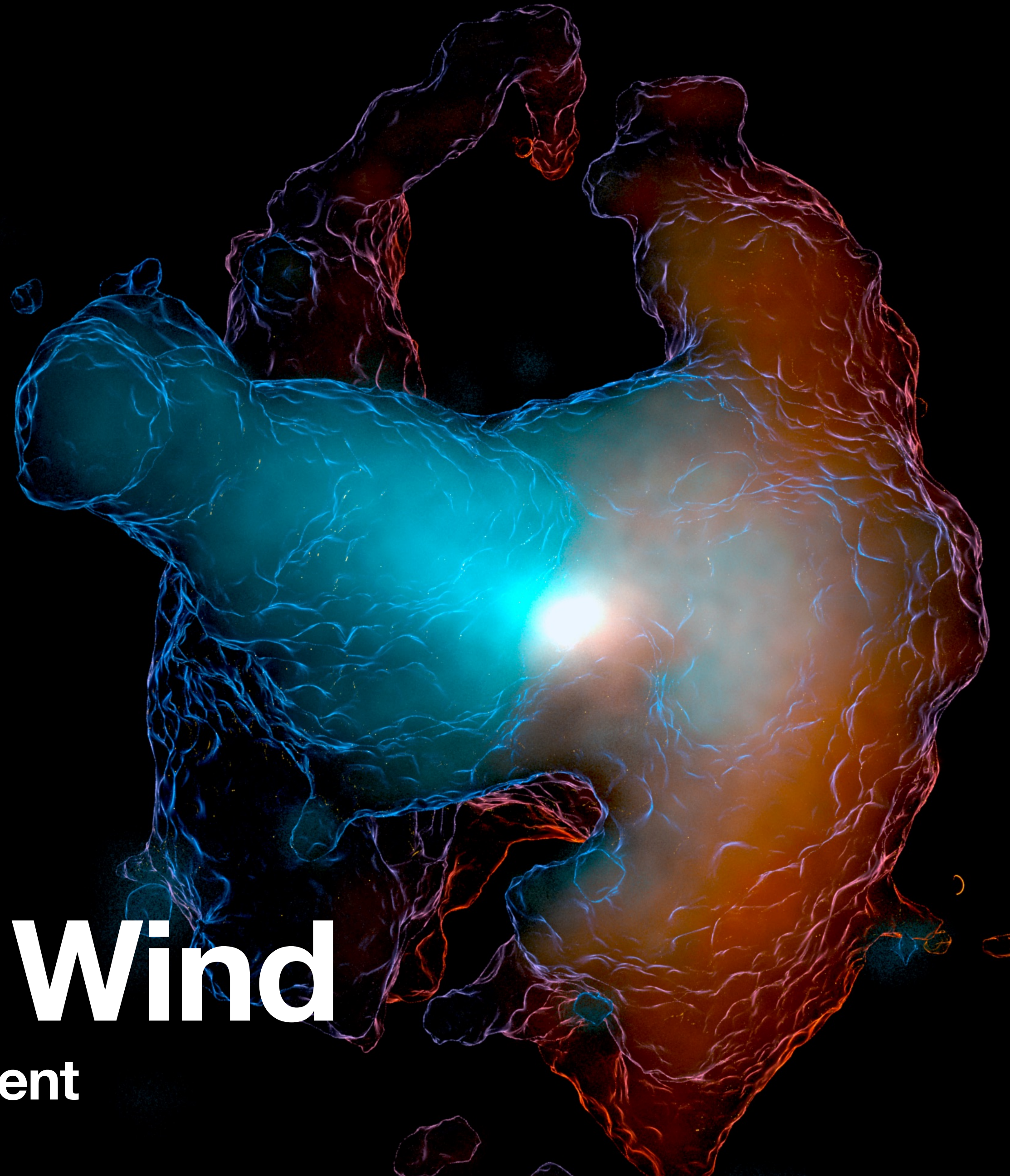
undergraduates:

Triet Ha, Shane

Caraker, Jack Harper

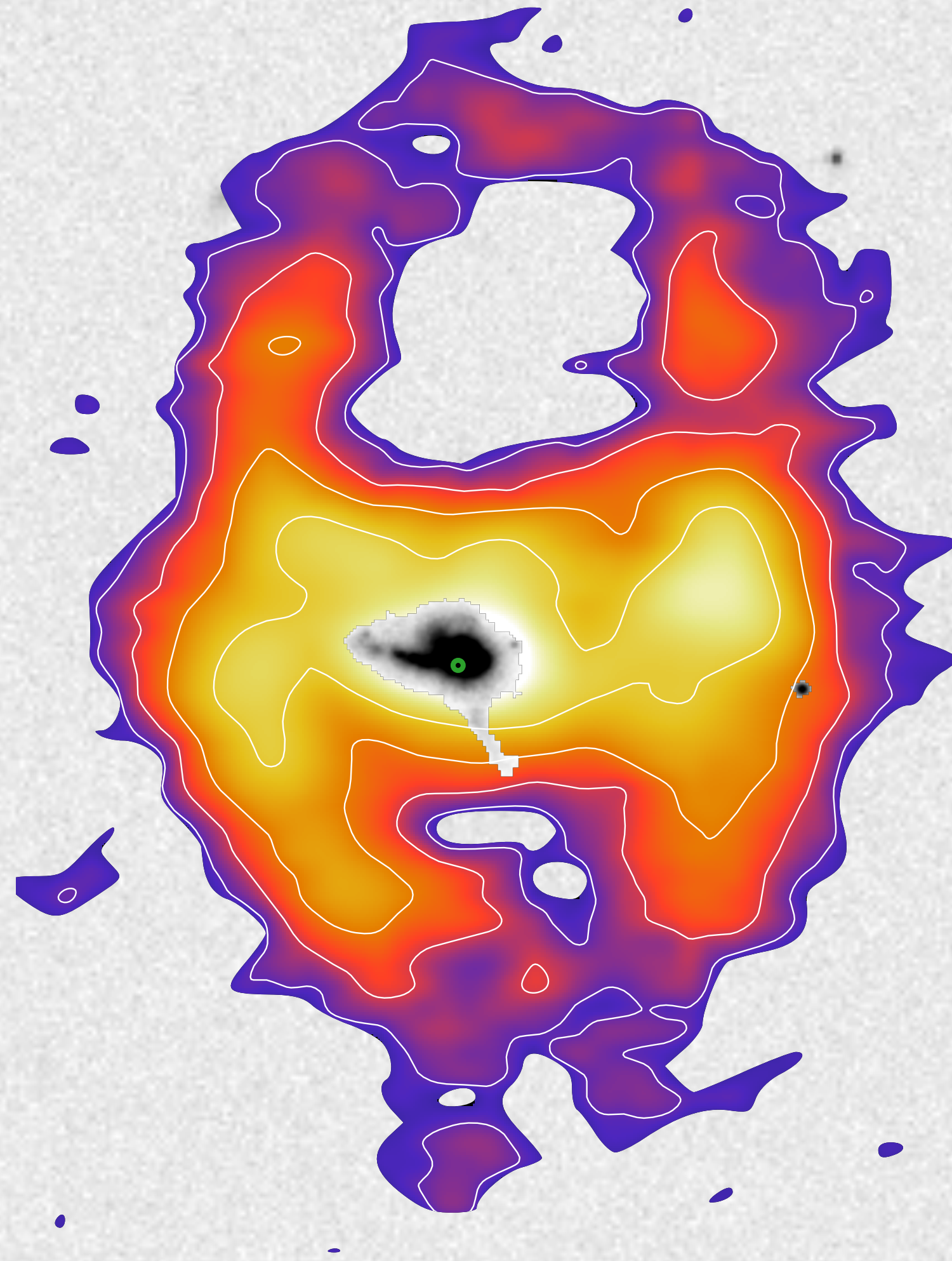
Growing in the Wind

Watching a Galaxy Seed Its Environment



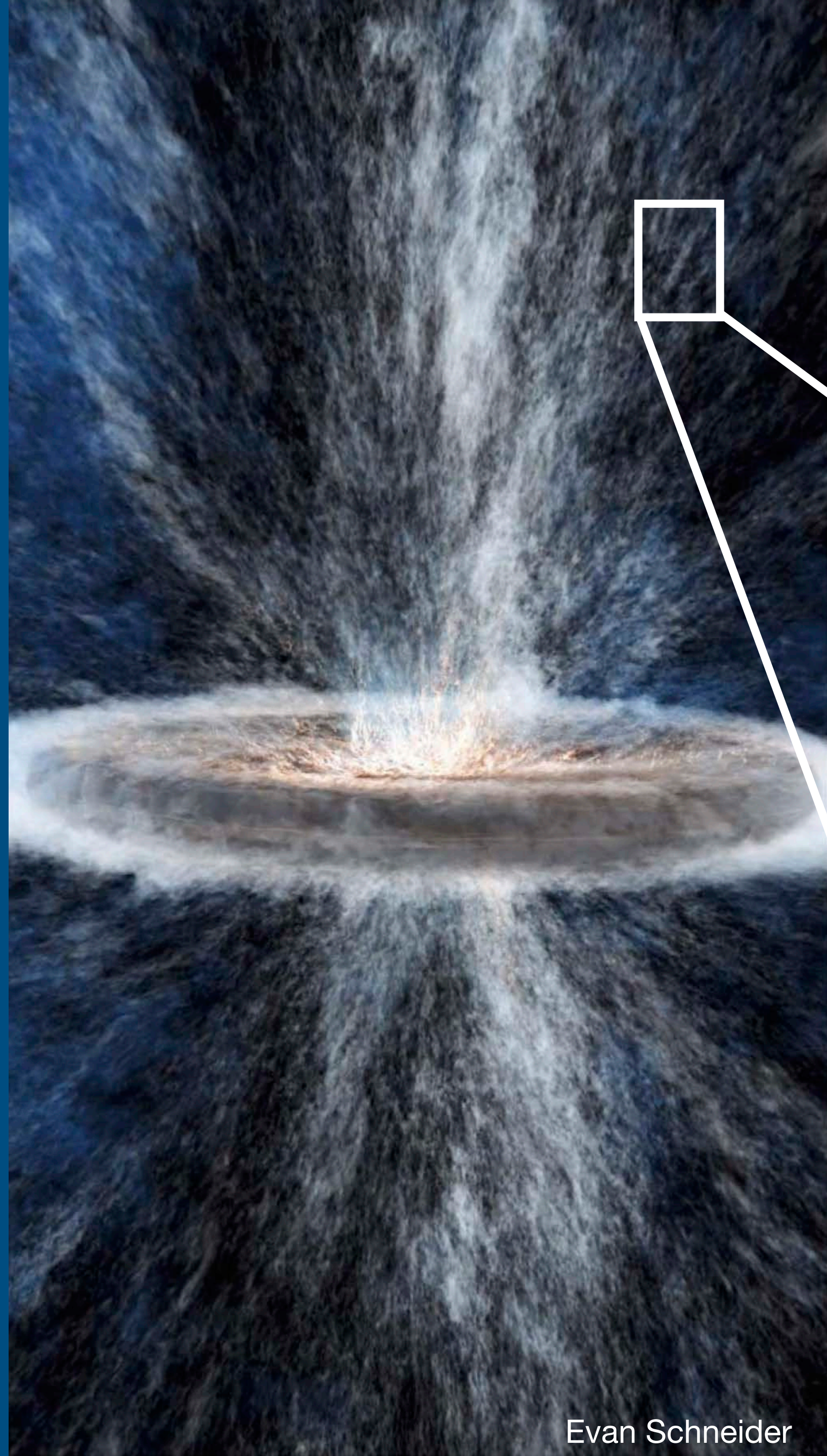
Makani is a Galaxy Seeding its Environment with Cool Clouds of Oxygen

300,000 light-years



Observed in the light of O^{+1} emission lines

Cool Clouds: Shredding and Growing in a Hot Wind?

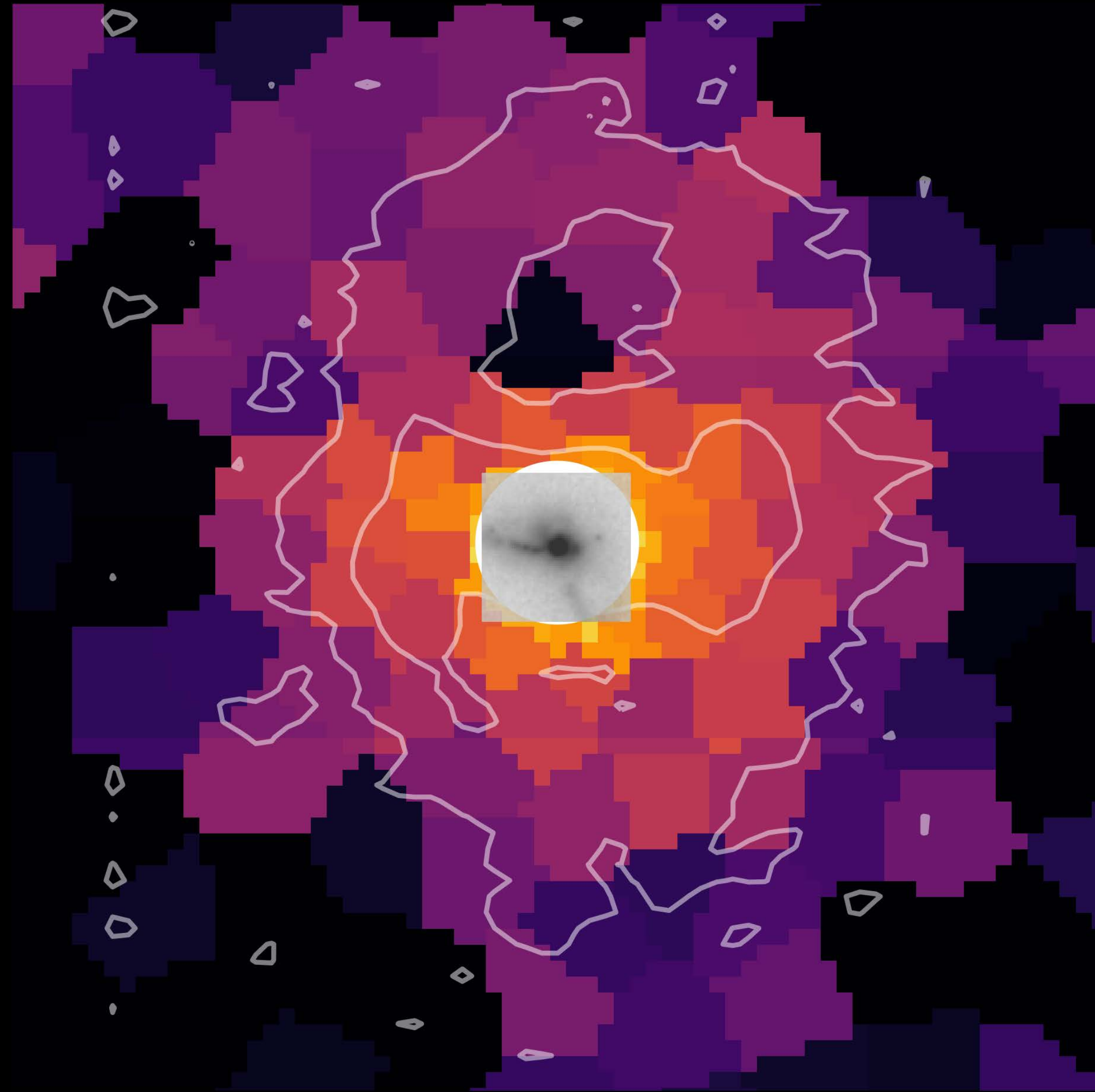


$t = 4.20 t_{cc}, m_{1/3} = 1.03 m_{cl}, v_{in} = 0.75 v_{wind}$

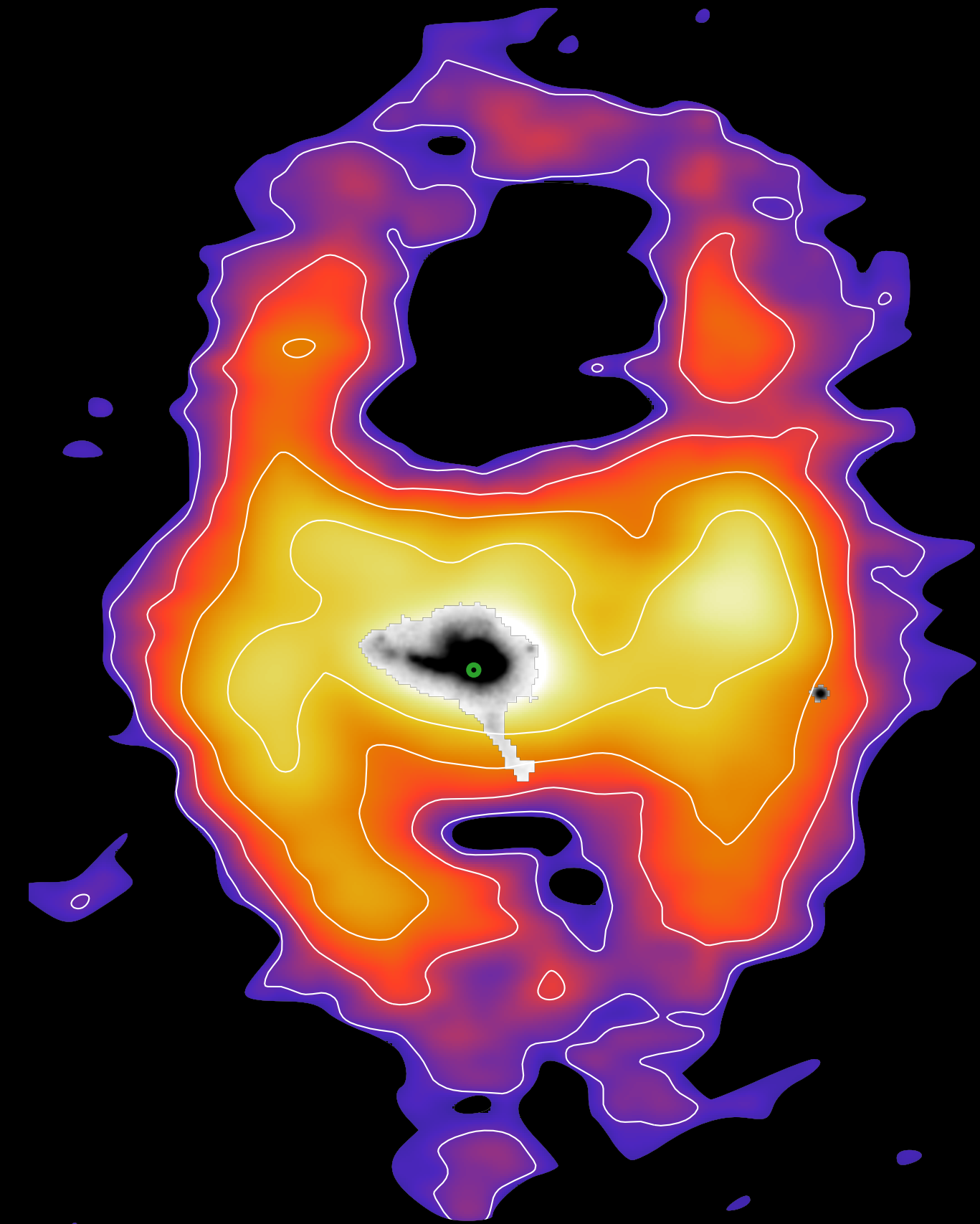
-10 -5 0 5 10 15
 x/r_{cl}

Max Gronke

A Hubble Image of Cool Clouds Growing in a Hot Wind

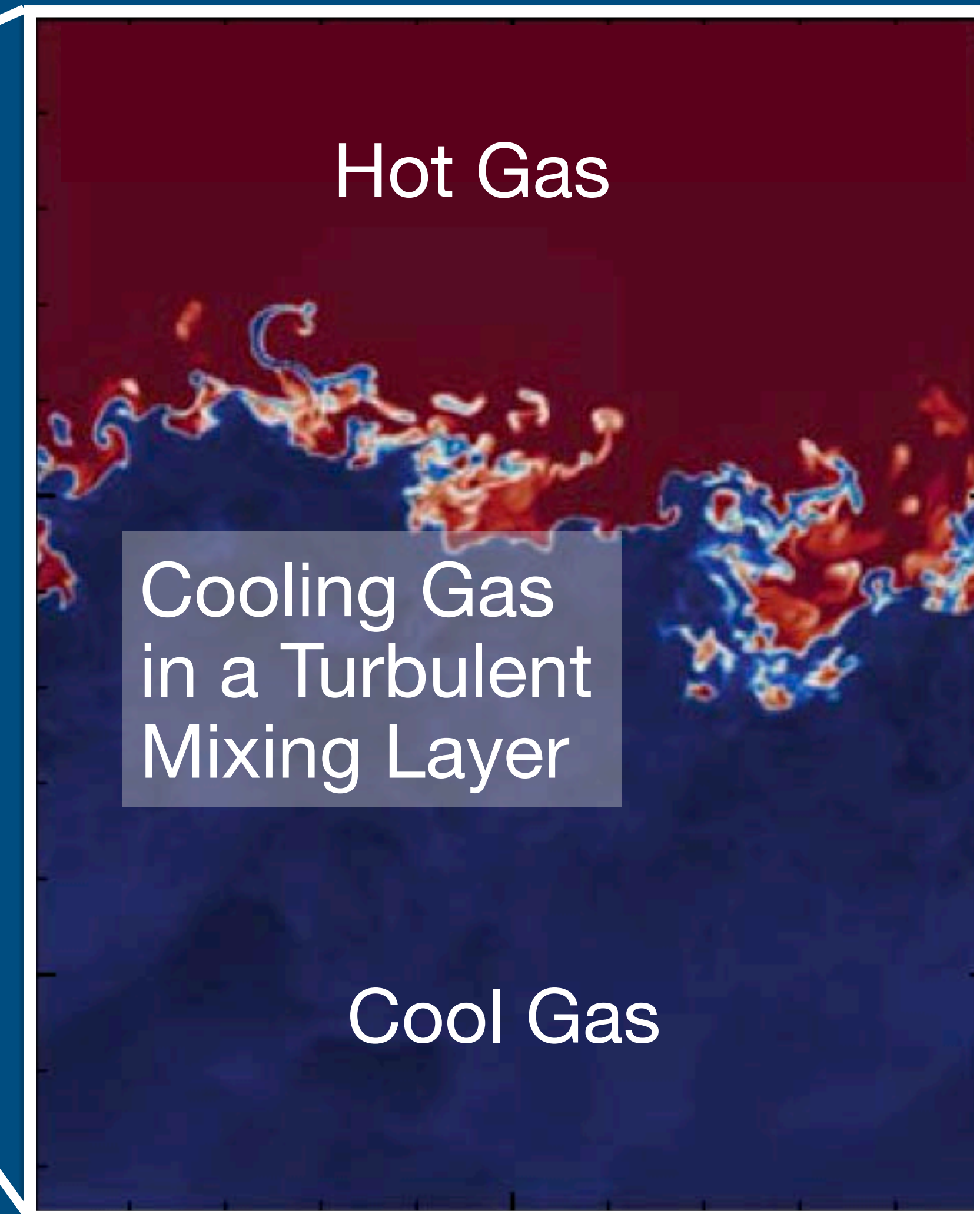
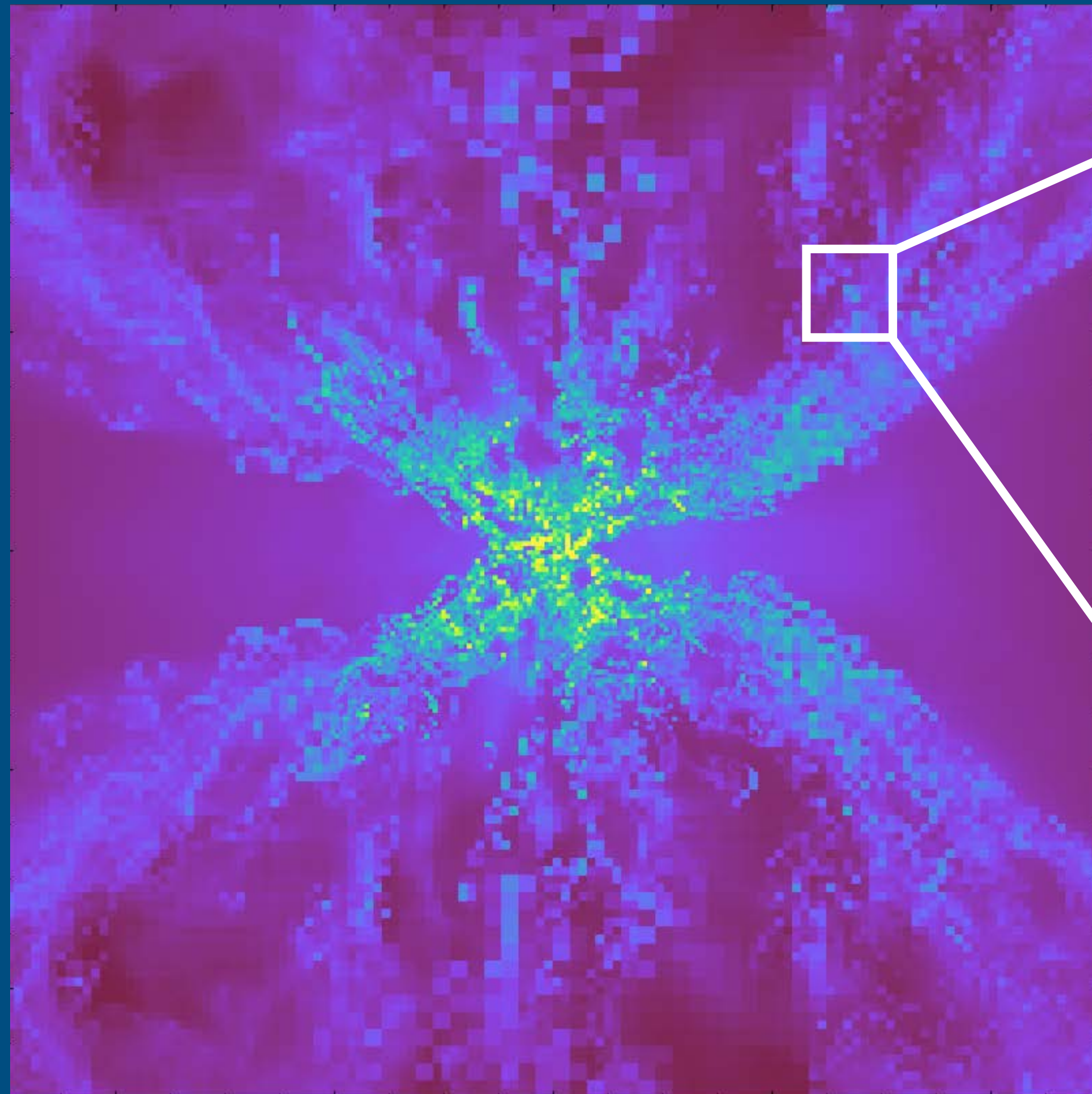


O⁺5 Emission Lines: 300,000 K gas



O⁺1 Emission Lines: 10,000 K gas

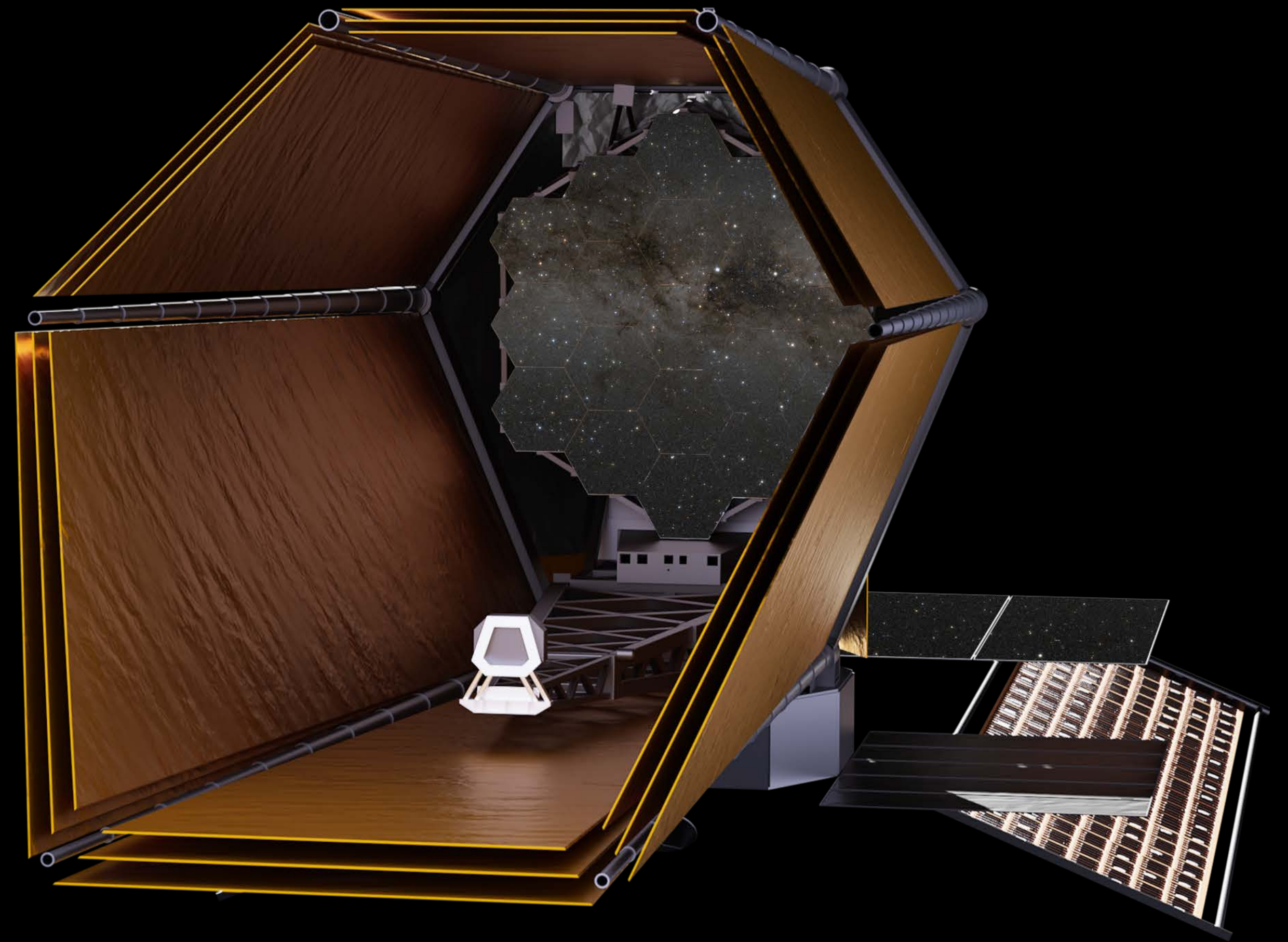
O^{+5} Emission is Strong in Cooling Clouds in Wind Simulations



A Simulation of O^{+5} Emission

Drummond Fielding

Observing Warm-Hot Gas in Galactic Ecosystems is a Key Science Goal of the Habitable Worlds Observatory



Growing in the Wind: Watching Makani Seed Its Environment

Poster

405.02

Thursday 9am



Paper

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David Rupke



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rupked@rhodes.edu

901-402-1797

