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## The interplay of SMBH feedback and the ICM in cosmological simulations

*Monday, 15 August 2022 14:35 (25 minutes)*

I will discuss highlights from our recent simulation results, focusing on the interplay of supermassive black hole feedback and the halo gas of massive groups and clusters. I will touch on (i) baryon redistribution and clusters as closed boxes, (ii) turbulence and kinematics in the ICM due to cosmological assembly versus feedback, (iii) the virial shock and the outskirts/IGM interface, (iv) cooling, cool gas, and star-formation in clusters, including its episodic nature. These studies are based on cosmological magneto-hydrodynamical simulations, primarily with the IllustrisTNG model, including the upcoming TNG-Cluster project.

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