

Celebrating 20 years of Swift Discoveries



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Type: **Invited talk**

Central Engines of Gamma-ray Bursts and Heavy Element Nucleosynthesis

Tuesday 25 March 2025 11:00 (30 minutes)

I will overview central engine models for gamma-ray burst jets and their connection to the creation of heavy element nucleosynthesis. Particular emphasis will be placed on the recent discovery of long GRBs with kilonova emission and how this discovery constrains the origin of jets from neutron star mergers. Time permitting, I will address possible connections between GRBs and other engine-powered transients such as superluminous supernovae and FBOTs.

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Session Classification: GRB central engines and jets