



Contribution ID: 21

Type: **Oral presentation (preferred)**

## Size, angular momentum and mass for objects

*Monday 25 September 2017 16:50 (20 minutes)*

We present a new geometrical inequality involving the ADM mass, the angular momentum and the size of an ordinary axially symmetric object. The main tool we use to prove it is the monotonicity of the Geroch quasi-local energy along the inverse mean curvature flow. We also compute numerical examples to test the robustness of our hypotheses and results.

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**Session Classification:** Accretion