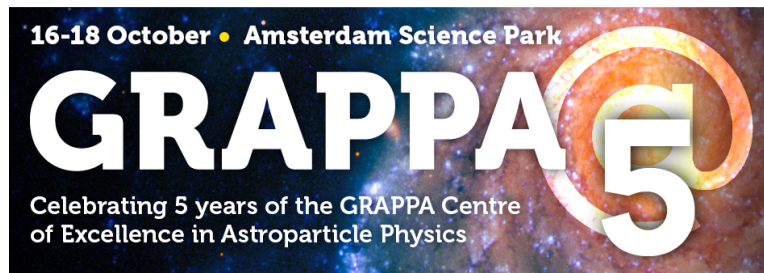


GRAPPA @ 5: Celebrating 5 years of astroparticle physics and cosmology in Amsterdam



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The Future of Gamma-ray Observations of Galaxy Clusters

Tuesday, 17 October 2017 13:00 (15 minutes)

Clusters of galaxies should host a significant amount of relativistic cosmic-ray protons accelerated by structure formation shocks during their assembly history, and re-accelerated by turbulence in merging clusters. The quest for the pion-decay emission from hadronic interaction of these relativistic protons with the ambient gas has so far been inconclusive. Nevertheless, gamma-ray observations are a unique tool to study non-thermal phenomena in galaxy clusters. In this talk I will briefly discuss the main achievements so far and focus on expectations for the future, in particular prospects for the CTA Key Science Project on galaxy clusters.

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