

ΓΕΝΙΚΟ ΣΕΜΙΝΑΡΙΟ ΤΜΗΜΑΤΟΣ ΦΥΣΙΚΗΣ

PHYSICS COLLOQUIUM

Thursday, 19 October 2017

17:00 -18:00

3rd Floor Seminar Room

"Monitoring Powerful Extragalactic Radio Sources - Past, Present, and Future."

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Abstract

The simple monitoring of the total flux densities of Powerful Extragalactic Radio Sources (PEGRS) appears superficially to be a rather humdrum exercise, and people not working in this field should be excused for wondering what one can possibly hope to learn from studies of radio brightness alone. Past: In this talk i will describe how the earliest observations of radio brightness of PEGRS led to a startling breakthrough in our understanding of the supermassive black holes that power the active galaxies hosting PEGRS. Present: I will then describe the present joint U. Crete + Caltech monitoring program and two fascinating discoveries on this program - the latest of which - the discovery of Symmetric Achromatic Variability (SAV) by Vedantham et al. 2017, ApJ, 845,89 -poses many baffling questions. Future: I will describe the follow-up program of the SAV discovery that my colleagues at U. Crete and I have embarked upon and what it might possibly tell us about relativistic jets and cosmology.