

On variability in obscured and unobscured AGNs

J. Polednikova^{1,2}, A. Ederoclite³, J. Cepa^{1,2}, J. A. de Diego Onsurbe^{1,4}, and J. I. González-Serrano⁵

¹ Instituto de Astrofísica de Canarias, C/ Vía Lactea s/n, La Laguna, Tenerife, Spain

² Departamento de Astrofísica, Universidad de La Laguna, Spain

³ Centro de Estudios de Física del Cosmos de Aragón, Teruel, Spain

⁴ Universidad Nacional Autónoma de México, México

⁵ Instituto de Física de Cantabria, CSIC-Universidad de Cantabria, Spain

Abstract

Quasars belong to the most energetic phenomena in the universe. Physical processes at the origin of them can be explained in the framework of the *AGN unified scenario*. The unified scenario predicts two classes of quasars, obscured and unobscured ones, depending on the orientation of the dusty torus which surrounds the central supermassive black hole. Variability is ubiquitous in AGN, and may be generated by several phenomena that would produce different footprints. Determining the nature and origin of the variability is a key subject to understand the differences between the different types of AGNs.