

V-236 dr. N. Padilla

Professor Padilla visited the Kapteyn Institute from February 11 until February 13, 2015. During the visit professor Padilla presented a colloquium on his work on the sensitivity of voids to signatures and characteristics of modified gravity. This was part of the purpose for the visit, our common work on the evolution of voids and their use as probes of dark matter and dark energy. While the current analysis of Padilla and collaborators is based on void identification by assuming a spherical void shape, we have developed a formalism, based on the watershed transform, that is capable of identifying voids of any shape and size. During the visit, we have been working on implementing the WVF method towards the use for studying voids in modified gravity cosmologies. In addition, there was ample opportunity to discuss the various projects we are involved in wrt. the study of the cosmic web.