Seminar Fizičkog odsjeka

Time (s.t.)

Place

Wednesday 15^{th} March, **16** h

room F-201

Interstellar dust in the X-rays

Dr. Elisa Costantini

Senior Research Scientist

SRON Netherlands Institute for Space Research, Utrecht

In this talk I will review the methods and the state of art of the study of interstellar dust as seen in the X-rays. X-rays are effectively scattered by dust grains along the line of sight. The effect is to produce a halo of diffuse emission around the source. This emission contains precious information on the geometry of the dust clouds and the dust size distribution. Even more powerful is the study of absorption by dust grains. Spectra of bright background sources are modified by absorption of intervening dust, producing features that are unique signatures of the different chemical composition of dust grains. We have recently performed a large measuring campaign using several Synchrotron facilities in Europe. Accurate laboratory measurements are essential for a correct interpretation of spectra of astronomical sources.

> Voditelji seminara FO Damir Pajić i Ivica Smolić