

Symposium

The astrochemical observatory: focus on chiral molecules *L'osservatorio astrochimico: obiettivo sulle molecole chirali*

Rome, March 22-23, 2018

Biblioteca dell'Accademia Nazionale delle Scienze detta dei XL
Scuderie Vecchie di Villa Torlonia - Via L. Spallanzani, 1/A

PROGRAM

THURSDAY, MARCH 22

- E. CHIANCONE: *Welcome address*
- V. AQUILANTI: *Opening remarks*
- P. LAZZARETTI: *Anapolar interaction of aminoacids and sugar in nonuniform magnetic fields: could energetic stabilization of a preferred enantiomer take place in interstellar space?*
- S. PICCIRILLO: *Chiral recognition in gas-phase molecular aggregates: the effect of halogen substitution*
- L. EVANGELISTI: *Microwave spectroscopy for chiral molecules: challenges for astrochemical observations*
- S. TURCHINI: *PhotoElectron Circular Dichroism: a versatile probe for chirality*
- S. STRANGES: *Low symmetry effect on the photoelectron dynamics of chiral molecules*
- S. FALCINELLI: *The double photoionization of propylene oxide*
- S. MELANDRI: *Accurate rotational spectroscopy for astrophysical investigations: the challenge of complex organic molecules and molecular complexes*

FRIDAY, MARCH 23

- W. CAMINATI: *Rotational spectroscopy and astrochemical observation: Some historical notes, recent advancements, and some contributions towards the observation of chiral and atropisomeric species*
- S. ABBATE, G. LONGHI: *Study of Near IR vibrational absorption and vibrational circular dichroism and of the role of mechanical and electrical anharmonicities*

- A. MARIS: *Spectroscopic signatures of bifunctional alkanes for search in the interstellar medium*
- F. PIRANI: *Stereodynamical effects by anisotropic intermolecular forces*
- P. CASAVECCHIA: *Astrochemical kinetics by crossed molecular beams*
- A. FILIPPI, M. SPERANZA: *Spectroscopic Discrimination Complexes Involving an Axially Chiral Receptor*
- M. SATTI: *HF molecule as a tracer of column density in interstellar diffuse gas: the adsorption on dust grain surfaces*
- D. ASCENZI: *Role of ions in astronomical environments*
- C. CECCHI PESTELLINI: *Chiral selection in space: the role of cosmic dust*
- S. LONGO: *Modeling of organic matter delivery from Space by sub-mm grains*
- P. DE BERNARDIS, G. SETTI, M. TAVANI: *News from the Universe*
- A. LOMBARDI, F. PALAZZETTI: *The project orXid, ORigin of CHiral Discrimination: A physico-chemical view*
- L. AVALDI: *Molecular Science and Technology @ Elettra: proposal of a new beamline*

Additional communications and conclusions

Scientific and organizing committee:

Vincenzo Aquilanti (University of Perugia, Uno dei XL, Linceo)
Andrea Lombardi (University of Perugia)
Federico Palazzetti (University of Perugia)