

## THE FANTASIO SET-UP (I): DESCRIPTION AND EXTENSION TOWARDS FEMTO-FANTASIO

K. DIDRICHE, C. LAUZIN, X. DE GHELLINCK, P. MACKO, A. RIZOPOULOS, P. VAN POUCKE, M. HERMAN, *Service de Chimie quantique et Photophysique CP160/09, Faculté des Sciences, Université Libre de Bruxelles (U.L.B.), Av. Roosevelt, 50, B-1050, Bruxelles, Belgium*; S. KASSI, *Laboratoire de Spectrométrie Physique, Laboratoire de Spectrométrie Physique, Université Joseph Fourier de Grenoble, B.P. 87, 38402 Saint-Martin-d'Hères Cedex, France.*

We have built the FANTASIO set-up (for "Fourier trANsform, Tunable diode and quadrupole mAss spectrometers interfaced to a Supersonic expansIOn") to investigate jet-cooled molecules and dimers<sup>a</sup>. The set-up will be described. New developments are on the way, to be illustrated by preliminary results. These include the doubling of the vacuum pumping system efficiency. They will also allow for a Femto OPO system to be used as a broadband, cavity enhanced absorption source to be interfaced to the supersonic expansion and to the high resolution FTIR instrument of FANTASIO.

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<sup>a</sup>M. Herman, K. Didriche, D. Hurtmans, B. Kizil, P. Macko, A. Rizopoulos and P. Van Poucke, *Mol. Phys.*, 105, 843 (2007).