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

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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[a]. 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.

[a] M. Herman, K. Didriche, D. Hurtmans, B. Kizil, P. Macko, A. Rizopoulos and P. Van Poucke, Mol. Phys., 105, 843 (2007).