Preface

The meeting aims to follow the interplay of the basic physics of active nuclei of galaxies with their galaxy host or environmental medium. The objectives are to understand the formation, the evolution and the interaction of the basic black hole with its accretion disk, the trigger of a relativistic jet, possibly inducing star formation. The new generation of telescopes and high- technology instruments (VLT, VLBI, AXAF and integral field spectrographs, adaptative optics) products a performant series of new results as the detection of a dust torus in AGN with adaptative optics or ionized filaments along radio isophotes with 3D spectroscopy. High-energy electromagnetic emissions (X- and Gamma- Rays) and non-electromagnetic (gravitationnal waves) were reviewed. The physics of accretion and jets is analyzed from a theoretical point of view with hydrodynamical simulations with or not magnetic field while high preformances of the VLBI are presented from an observational point of view. Fundamental causes of evolution of radio-sources, in relation with a possible star formation process are reviewed, in particular at high redshifts to explore the influence of radio-sources on galaxy evolution. Observational signatures as emission lines, their spatial distributions with 3D-units, the slopes and lines of the host galaxy continua are analyzed to access to the present and past activity of these galaxies, giving new ideas on the AGN-Starburst connection. Finally a variety of observational results were presented on posters. About 100 researchers were registered and attended the JENAM meeting. Most of them were active members of the AGN rencontre, with an large majority of europeans coming from UK, Spain, Belgium, The Netherlands, Italy and Germany.

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