Local Group, Local Cosmology

Symposium V of EWASS 2013, Turku, July 08-09, 2013

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Sponsorship

European Astronomical Society (EAS)
Netherlands Organization for Scientific Research (NWO)
Kapteyn Astronomical Institute, University of Groningen
Instituto de Astrofísica de Canarias (IAC)

FOREWORD

The Local Group is the crossroads of a huge observational effort, which is constantly increasing our knowledge of the kinematic properties, star formation histories, and chemical evolution of nearby systems. A careful comparison between these empirical data and the predictions of cosmological models represents a crucial step towards a deeper understanding of the entire galaxy formation process, which includes the origin of the first cosmic objects. Local Cosmology is providing crucial insights on the early cosmic star-formation along with fruitful links with the high-redshift Universe, which can be tested by using the observations of more distant systems.

All these different aspects have been discussed in the Symposium *Local Group, Local Cosmology*, held in Turku (Finland) on the 8-9th July 2013, during the European Week for Astronomy and Space Science (EWASS 2013). The Symposium brought together international experts from complementary astronomical communities, and it proposed a transverse program, that juxtaposed Local and high-redshift observations, besides observers and theoreticians. It seems that this approach has been successful, given the large number of participants (> 50) during all the scientific sessions and the lively discussion following each talk. The present volume wants to be a record of such an exciting experiment.

We take the opportunity to thank all the participants for their high quality presentations and for their enthusiasm, which made the Symposium intense and successfull, as also demonstrated by this conference book. We are particularly greateful to our invited speakers, which positively accepted our invitations and came all the way long to the northern Turku even without our financial support. We warmly thank the Scientific Organizing Committee for their precious advices in defining the scientific program: Wako Aoki, Michele Bellazzini, Volker Bromm, Giuliana Fiorentino, Despina Hatzidimitriou, Ewa Lokas, Eline Tolstoy. We are extremely greateful to the Local Organizing Committee, Giuliana Fiorentino, Andrés del Pino Molina & the students from Turku, which helped us in solving unpredictable technical problems. Special thanks to one of the co-chair of EWASS 2013, Pasi Nurmi, who kindly and quickly replied to all our emails. The final thank is for Dr. Giuliana Fiorentino, who made all this possible, introducing one to the other and encouraging our collaboration to propose an EWASS Symposium.

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The Symposium Organisers:
Matteo Monelli & Stefania Salvadori

Cover caption: schematic view of the Symposium that juxtaposed theorists and observers to discuss the formation and evolution of the first cosmic objects and their observational counterparts: from distant Damped Lyman-alpha Absorption systems (DLAs), to Local Group Dwarf galaxies and Extremely Metal-Poor stars (EMPs). Pictures 1 and 2 (left) by Pasi Nurmi.

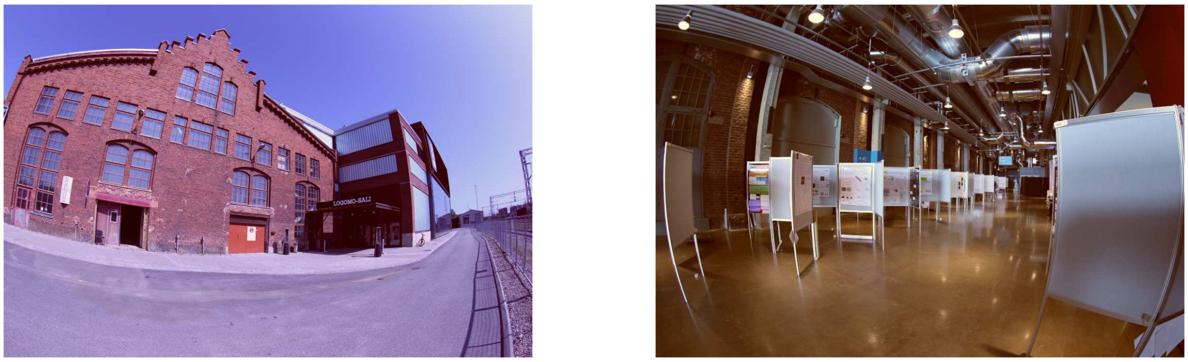

Fig. 1. *Left:* Logomo Sali. *Right:* poster hall.

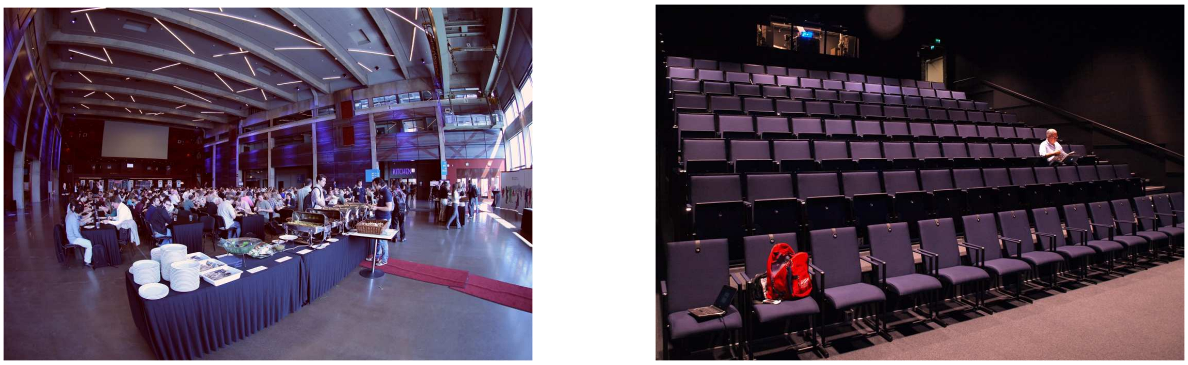

Fig. 2. *Left:* lunch breaks. *Right:* the conference room.

Fig. 3. *Left:* Local Group, Local Cosmology. *Right:* the organizers of the Symposium.