



Nearby Galaxy Working Group Summary

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<https://wiki.mpe.mpg.de/eRosita/erogal>

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Science Projects – Local Group

Study of X-ray source populations in Magellanic Cloud System (LMC, SMC and Bridge)

Frank Haberl, Manami Sasaki, Jonathan Knies, Dominic Bernreuther, Chandreyee Maitra, +

Transients in the Magellanic system (EROTDA) Frank Haberl, Chandreyee Maitra, +

Identification of HMXBs in the Magellanic System Frank Haberl, Chandreyee Maitra, +

Census of supersoft X-ray sources (SSSs) in the Magellanic Clouds F. Haberl, C. Maitra, +

Supernova remnants in the LMC (EROSNR) Frank Haberl, Manami Sasaki, Werner Becker, +

Variability study of point sources in the LMC: Comparison of XMM and eROSITA catalogues Chandreyee Maitra ([talk](#)), Frank Haberl, +

Astrometry with X-ray identified AGN in the LMC - input catalogue and application to eROSITA Chandreyee Maitra, Frank Haberl, +

Study of X-ray source populations in dwarf galaxies in the Local group

Manami Sasaki, Frank Haberl, Sara Saeedi, Lorenzo Ducci, +

Science Projects – Normal Galaxies in local Universe

Study of nearby starburst galaxies

Manami Sasaki, Frank Haberl, +

Normal Galaxies in the local Universe - eROSITA simulations

Ann Hornschemeier, +, EC proposal 02-May-2017, **paper in progress**

Frank Haberl

Normal Galaxies in the local Universe - eROSITA first year

Ann Hornschemeier, +, EC renewal pending 25-Feb-2019

Frank Haberl, Manami Sasaki, Chandreyee Maitra

Luminosity functions of Normal Galaxies detected by eROSITA

Andreas Zezas, +, EC proposal pending 23-Feb-2019

Frank Haberl, Manami Sasaki, Chandreyee Maitra

Heraklion Extragalactic Catalogue (HECATE; Kowlakas, Zezas et al. in prep.)

- All known galaxies within 200 Mpc (100.000)
- SFR, stellar mass
- Angular size
- Metallicity

Offer for general use by the eROSITA team before final publication → NRTA/eSASS

Projects from IAAT in the CO WG (Andrea Santangelo):

- **Project 1:** Accreting Neutron Stars and Black Holes
(As presented in the eRO-STEP DFG FG) (A. Santangelo+)
- **Project 2:** Accretion states in Neutron Star binaries in the MW and Magellanic clouds (V. Doroshenko+)
- **Project 3:** The quiescence spectra of BHs (L. Ji+)
- **Project 4:** Low level accretion in magnetized NS (V. Doroshenko+)
- **Project 5:** Fishing expedition for Superbursts (L. Ji+)
- **Project 6:** Searching for DM with eROSITA (D. Malishev+)
- **Project 7:** Fast Ultraluminous X-ray flares from nearby galaxies (I. Ducci+)

Potential overlaps

Coordination/collaboration is encouraged

Details need to be discussed