A SYNOPTIC VIEW OF THE MAGELLANIC CLOUDS:
VMC, GAIA AND BEYOND

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X-ray probes of the Magellanic Clouds: The supernova remnants and hot phase of the ISM

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Supernova remnants (SNRs) are key transmitters of stellar feedback to the interstellar medium (ISM). The shock waves produced in the death of stars carve out large structures and heat the ambient gas, while the metals produced during the life of the star and final explosion are released into the ISM. Both Magellanic Clouds have been covered by large X-ray surveys, providing the best diagnostic of SNRs and of the hot phase of the ISM. These X-ray datasets allow a spatially-resolved measurement of the physical properties and gas-phase abundance of the hot ISM in the Magellanic Clouds. Meanwhile, SNRs provide clues to the Clouds' past (common ?) star formation histories by the comparison of the ratio of supernovae from both types in the LMC and SMC. Finally, the amount of absorbing gas towards SNRs is a proxy of their line-of-sight location within the Clouds and offer another window to their three-dimensional structures.