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The road from meridian circles to Gaia and beyond

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Abstract:

The presentation shows how a fundamental and 2000 years old branch of astronomy, the measurement of positions of stars on the sky, astrometry, was revolutionized during the past one hundred years. -- This modern development of astrometry began with the application of electronic and digital techniques on the ground at three meridian circle telescopes, at first in Denmark in Copenhagen and at Brorfelde and then in Germany at Hamburg-Bergedorf. The development was continued with space technology in the two large ESA satellites Hipparcos and Gaia launched in respectively 1989 and 2013. Results from Gaia for 1.8 billion stars have been published by 2020 and papers from all branches of astronomy and astrophysics have been published. -- The presentation was given on 17 September 2019 in Stuttgart at the annual meeting of the Astronomische Gesellschaft when the instrument development prize 2019 was awarded to three key persons Lennart Lindegren, Erik Høg, and Michael Perryman:

<http://www.astro.ku.dk/~erik/xx/InstrumentPrize2019Award.pdf> .
