Curriculum Vitae

Contact information

Marten Henric van Kerkwijk

Department of Astronomy and Astrophysics tel.: +1(416)946-7288 University of Toronto fax.: +1(416)946-7287

50 Saint George Street e-mail: mhvk@astro.utoronto.ca

Toronto, ON, Canada M5S 3H4 www: http://www.astro.utoronto.ca/~mhvk

Education

1983–1988: Undergraduate, University of Amsterdam; 'doctoraal' (equivalent to MA, 'cum laude'), October 1988 (thesis: Massive X-ray binaries, Observations of One and Theory on All, ^{1, 2} superviser: E. P. J. van den Heuvel).

1988–1993: 'Assistent in Opleiding' (PhD student), University of Amsterdam; PhD, November 1993 (thesis: The mass of Vela X-1, the nature of Cygnus X-3, the character of Be stars, 10, 11, 16, 18 superviser: J. van Paradijs).

Employment and honours

1988–1993: 'Assistent in Opleiding' (PhD student) at the University of Amsterdam.

1993–1997: Hubble Fellow at the California Institute of Technology.

1997–1998: Postdoctoral Research Associate at the University of Cambridge, Institute of Astronomy.

1998–2001: 'Docent/Onderzoeker' (tenured assistant professor) at Utrecht University.

1998–2002: Supported by a fellowship of the Royal Netherlands Academy of Arts and Sciences (KNAW).

2001–2002: 'Senior Docent/Onderzoeker' (associate professor) at Utrecht University.

2003– : Full professor at the University of Toronto.

2010 : Moore fellow during sabbatical stay at the California Institute of Technology.

2013-2014: Guggenheim fellow.

Research areas

Compact objects, stars and binaries, their structure, formation and evolution, and their use to infer fundamental physical properties.

Teaching experience

Toronto, undergraduate: 'Stars and planets,' 'Introduction to astrophysics,' three large 'astronomy for poets' classes, a first-year lecture series; graduate: 'Transients,' 'Stars', mini-courses on statistics and star formation.

Utrecht, senior undergraduate: stellar evolution, parts of star and planet formation; teaching qualification in 2001.

PhD students

1998–2002: Rubina Kotak (Lund), Inside pulsating white dwarfs: Clues from time-resolved spectroscopy.^{53, 54, 57, 65}

1998–2003: Ferdi Hulleman (Utrecht), Anomalous X-ray pulsars at visible and infrared wavelengths. 38, 40, 47, 66

2002–2006: Martin Durant (Toronto), Magnetars: distances, variability, and multi-wavelength obs. 70, 73, 81, 83, 84, 85

2002-2006: Cees Bassa (Utrecht, primary supervisor Frank Verbunt), Optical studies of compact binaries

in globular clusters and the Galactic disk.^{63, 78, 80}

2005–2009: Duy Nguyen (Toronto, joint with Ray Jayawardhana), multiplicity of young stars. 102, 103, 116

2009–2014: Kelly Lepo, Progenitors of type Ia supernovae. ¹²⁶

2011– : Charles Zhu, Mergers of white dwarfs and thermonuclear supernovae. 123, 131

2014– : Robert Main (joint with Ue-Li Pen), Precision astrometry using pulsar scintillation.

Observing experience

Optical observations with telescopes on Calar Alto (1.2m, 2.2m), La Palma (WHT), La Silla (1m, CAT, ESO 1.5m, NTT, ESO 3.6m), Paranal (Antu), Mauna Kea (UKIRT, Keck, CFHT), Palomar Mountain (200"), and Cerro Tololo (Magellan), as well as with HST. Pulsar work with Arecibo, Parkes, ARO, and GMRT. Analysis of data from IUE, EXOSAT, ROSAT, Chandra, and XMM.

Organisational experience

Organised Monday Tea Talks at Caltech and colloquia in Utrecht and Toronto. Organised the 2000 Dutch Astronomers Conference. Member of the review committee for astronomy of NWO (Netherlands Organisation for Scientific Research), of the HST panel for binaries, ESO TAC for stars, NFRA TAC (Westerbork, ING, JCMT), and Canadian TAC (CFHT, Gemini). Served as member and chair of the Joint Committee for Space Astronomy, and member of the Mid-Term Review committee.