Prof.dr.ir. Mark Bentum MBA
November 2, 2018

INAUGURAL LECTURE
The next challenge - space-based radio astronomy

DEPARTMENT OF ELECTRICAL ENGINEERING

TU/e
EINDHOVEN UNIVERSITY OF TECHNOLOGY

INVITATION

Prof.dr.ir. Mark Bentum MBA was appointed full Professor of Radio Science in the Department of Electrical Engineering at Eindhoven University of Technology (TU/e) on September 1, 2017. He will deliver his inaugural lecture on Friday, November 2, 2018.
The Executive Board of Eindhoven University of Technology cordially invites you to attend the inaugural lecture of Prof.dr.ir. Mark Bentum MBA on Friday, November 2, 2018, at 4.00 PM. The public lecture will be delivered in the Blauwe Zaal of the Auditorium. You do not need to register.

The lecture concerns

‘The next challenge – space-based radio astronomy’

After the lecture, drinks will be served in the Senaatszaal.

All full professors are invited to join the cortège. If you want to join the cortège, please register in advance with the P&P office which organizes all academic ceremonies, telephone +31 (0)40 247 25 15, e-mail: penp@tue.nl.

Prof.dr.ir. F.P.T. Baaijens
Rector Magnificus

After November 2, 2018, the text of the inaugural lecture will be available online at www.tue.nl/lectures.

Mark Bentum received his MSc degree in Electrical Engineering (with honors) in August 1991 and his PhD degree in Electrical Engineering in December 1995, both from the University of Twente. In June 1996 he joined the Netherlands Foundation for Research in Astronomy (ASTRON). In 2005 he was involved in the eSMA project in Hawaii to correlate the Dutch JCMT mm-telescope with the Submillimeter Array (SMA) of Harvard University. From 2005 to 2008 he was responsible for the construction of the first software phased array radio telescope in the world, LOFAR (Low Frequency Array). In 2008 he became an Associate Professor in the Telecommunication Engineering Group at the University of Twente. In 2017 he became full Professor of Radio Science at Eindhoven University of Technology. He is also associated with ASTRON as head of the Radio Group in the R&D department.

About the lecture

Are we alone? What is dark matter? What is dark energy? And what about black holes? What is inside a black hole? And what happened before the Big Bang? These are the main research questions for astronomers at this moment in time. Monitoring the universe with different instruments will eventually enable us to answer these questions. To open up a completely unexplored frequency band for observations, space-based radio astronomy at low frequencies is suggested. This technology utilizes hundreds, perhaps thousands, of simple antennas on satellites, flying around in the universe far away from Earth. Together they form what is known as an aperture array, ready to peer more deeply at the fabric of our universe, unraveling today’s mysteries as well as discovering new phenomena.

The lecture will be given in Dutch.

Visiting address Auditorium, Building 1, Groene Loper, Eindhoven