



## **Revolution in Accelerator Land**

Marnix van der Wiel

*Department of Applied Physics,  
Eindhoven University of Technology*

Current issues in accelerator physics, both for high-energy physics and for the generation of synchrotron radiation, are: increase of beam brightness, reduction of the pulse length and compactness. One of the promising approaches, which would constitute a true revolution, is that of the laser wakefield accelerator. Recently, FOM approved a national programme in this area, in which the TU-Eindhoven, FOM-Rijnhuizen and the U-Twente plan to develop innovative solutions for the various components of a wakefield accelerator. The current status of the programme will be reviewed, the ultimate challenge being to work towards a table-top free electron laser for XUV radiation.