

Date: Thursday, 30 April 2015
Time: 5.30 - 7.00 pm
Venue: New Law School Seminar 020, The University of Sydney

To celebrate the **International Year of Light**, CUDOS is **hosting a set of presentations** describing how scientific breakthroughs in the understanding of light have changed and improved our lives. Using **Nobel prizes awarded for light-related research** as a guide, an inspirational set of expert speakers will discuss how our understanding of light has changed since the early 20th century, how this understanding has helped change society for the better, and how it helps us understand our place on earth and beyond.

INAUGURAL SPEAKER: MARTIJN DE STERKE Blue Light and dark screens - semiconductor LEDs and the lighting revolution



Through Physics Nobel prizes awarded since their inception in 1901, Martijn de Sterke, Professor at the School of Physics, will track the breakthrough ideas and developments that have led to the development of blue semiconductor lasers and their many applications. This will take us through the Physics prizes awarded in 1922 (Bohr — emission of light), 1956 (Shockley, Bardeen, Brattain — semiconductor physics), 1964 (Townes, Basov and Prokhorov — lasers), 1991 (de Gennes — liquid crystals), 2000 (Alferov, Kroemer — semiconductor heterostructures), and 2014 (Akasaki, Amano and Nakamura — blue lasers).

Following the presentation light refreshments will be served. There will be also an opportunity to participate in **futuristic experiences**, courtesy of the University's **ICT Innovation TechLab**. This lab houses the kinds of new technologies once only dreamed of in the realm of science fiction: Check out the Oculus Rift, a new virtual reality headset that lets players step inside virtual worlds, which will have an optics theme. The Leap Motion Controller tracks both hands and all 10 fingers with incredible speed - so you can play, create and explore without touching anything.



Registration is not required but please arrive early as seating is limited.

For further information visit our webpage at
www.cudos.org.au/nobelprizesForLight

