



Invitation to the

2nd W. K. Clifford Prize Lecture at UCL London

The Department of Mathematics of University College London honours the laureates of the W. K. Clifford Prize, by offering them the opportunity to deliver a special lecture.

William Kingdon Clifford worked from 1871 until his untimely death in 1879 as Professor of Applied Mathematics at University College London, holding the Goldsmid Chair.

The W. K. Clifford Prize was instituted by the International Conference on Clifford Algebras and their Applications in Mathematical Physics (ICCA). In August 2014, *David Eelbode* of the University of Antwerp (Belgium) was awarded¹⁾ the second W. K. Clifford Prize for his outstanding mathematical research achievements in the fields of harmonic and Clifford analysis with applications in theoretical physics.

The special lecture will be given by David Eelbode.

Venue: Department of Mathematics²⁾, University College London, 25 Gordon Street, London WC1H 0AY, Room 505 (5th floor).

Date: Friday, the 7th of November 2014.

Programme:

4 pm: Welcome

4.20 pm: Opening session
N. R. McDonald (Head, Dept. of Mathematics, UCL):
William K. Clifford and UCL

4.30 pm: 2nd W. K. Clifford Prize Winner Lecture
Chairman: W. Spröβig (University of Freiberg)
D. Eelbode: *Higher Spin Clifford analysis*

5.30 pm: Reception³⁾ in room 502 offered by the Department of Mathematics UCL.

Abstract:

The Dirac operator is a fundamental operator in quantum mechanics; it is used e.g. to describe the behavior of the relativistically moving electron. Whereas classical Clifford analysis has mostly been focusing on the function theory for the Dirac operator in arbitrary dimension, recent work has shown that Clifford analysis also offers an elegant and explicit framework to study similar questions for more general conformally invariant operators acting on functions taking values in arbitrary finite-dimensional irreducible representations for the spin group. An overview of this branch of Clifford analysis will be given, hereby focusing on construction, symmetry and solutions of the equations.

¹⁾ See also: <http://www.ams.org/notices/201408/rnoti-p907.pdf>

²⁾ See also: <http://www.ucl.ac.uk/mathsf/find-us>

³⁾ People who wish to attend the reception are kindly requested to register (until the 7th of October 2014) by sending an email message to F. Brackx fb@cage.ugent.be, Secretary of the W.K. Clifford Prize Committee.