2017 Hall Medal awarded to John Bamberg

Dr. John Bamberg has made outstanding contributions to finite geometry and permutation group theory, and in particular to polar spaces, generalised polygons, and the theory of innately transitive permutation groups. His principal achievements include the introduction of the notion of an intriguing set (with Kelly, Law, and Penttila), which has unified pre-existing notions in finite geometry and reinvigorated the use of methods in algebraic graph theory to solve problems in finite geometry. Amongst his substantial results on symmetries of geometric objects, Dr. Bamberg (with Penttila) resolved a famous conjecture of Cameron and Liebler, open since 1982; and amongst his contributions on symplectic spreads he has constructed a new infinite family of spreads of finite symplectic polar spaces (with Ball, Lavrauw and Penttila). Dr. Bamberg's results have been described as remarkable, extensive generalisations, substantial, and surprising, and he is regularly invited to lecture at conferences nationally and internationally.