IMS Annual Meeting Institute of Technology Sligo

August 31 and September 1, 2017

The meeting was hosted by the Mathematical Modelling Research Group of IT Sligo and was organised by Dr Leo Creedon, Kieran Hughes and Fergal Gallagher.

On the first day, Registration (and refreshments) ran from 11:00-12:00 and there were breaks for lunch and coffee. There was a poster session at 17:30, and the conference dinner was held at the Glasshouse Hotel in the city centre, from 19:30. On the second day, there was a meeting of the IMS Executive Committee from 08:30–10:00, and the Society's Annual General Meeting was held from 13:00–14:30. The meeting closed at 17:30.

The meeting was opened by Dr Dr Brendan McCormack, President, IT Sligo. About 50 members attended.

The schedule of invited talks was as follows:

Thursday, 31 August

- **13:00-14:00:** Ted Hurley (NUI Galway): Algebraic structures for communications
- **14:00-15:30:** Eoin Gill (WIT): *Maths Week*

Peter Lynch (UCD): Pedro Nunes and the Retrogression of the Sun

Fergal Gallagher (IT Sligo): Optimal Codes and Group Algebras

- **16:00 16:30:** Kieran Hughes (IT Sligo): Group Algebras, Codes and Derivations
- **16:30 17:30:** Des MacHale (UCC): Sherlock Holmes, James Moriarty, and George Boole

Friday, September 1

10:00 - 11:30: Olga O'Mahony (NUI Galway): Edge-minimal graphs of exponent 2

Malgorzata Wieteska (IT Sligo): Mathematical Modelling of the Bovine Estrus Cycle

Konrad Mulrennan (IT Sligo): A comparative study of machine learning algorithms applied as soft sensors in a polymer extrusion process

- 12:00 12:40: Dana Mackey (DIT): Interval Filling and Immunodiagnostics
- 14:30 16:00: Richard Karsten (Acadia University, Nova Scotia, Canada): Applying mathematics to Tidal Energy
 Rogrio Villafranca (UFABC, Sao Paulo, Brazil): Abelian codes: some results from group rings
 Stephen McGuire (Maynooth University): On a Lemma of Bernik
- **16:30 17:20:** Rod Gow (UCD): George Gabriel Stokes: the work of a versatile and influential mathematician