

Preface

The workshop 'Singularities in Geometry and Applications III' was the third in a sequence of biennial workshops, the first being at Valencia, Spain in 2009¹ and the second at Będlewo, Poland, in 2011². The whole sequence is a tribute to the inspirational work of Carmen Romero Fuster, and the fourth term of the sequence is scheduled to take place in Japan in 2015. The third workshop, held at the International Centre for Mathematical Sciences (ICMS) in Edinburgh, Scotland from 2 to 6 September 2013, attracted 76 participants from 19 countries. The workshop celebrated the 60th birthday of Stanisław Janeczko and included a lecture about his work by Wojciech Domitrz.

The plenary lectures were as follows:

Andrew du Plessis, 'Complete transversals revisited'
Wolfgang Ebeling, 'Variance of the exponents of orbifold Landau-Ginzburg models'
Goo Ishikawa, 'The D_4 -triviality and singularities of tangent surfaces'
Shyuichi Izumiya, 'Caustics of world sheets in anti-de Sitter space'
Stanisław Janeczko, 'Cycles in combinatorial parametrization of tetrahedral chains'
Oleg Karpenkov, 'Global relations for toric singularities'
Wojciech Kucharz, 'Stratified-algebraic vector bundles'
Anatoly Libgober, 'Abelian varieties associated with plane curve singularities'
David Mond, 'Open problems in singularities of mappings from n space to $n + 1$ space'
András Némethi, 'Lattice cohomology for superisolated and Newton nondegenerate singularities'
Juan José Nuño-Ballesteros, 'Contact properties of surfaces in 3-space with corank 1 singularities'
Patrick Popescu-Pampu, 'The self-dual lattices of plane branches'
Anna Pratussevitch, 'Higher spin bundles on Klein surfaces'
Richard Rimanyi, 'Thom polynomials as structure constants'
Viacheslav Sedykh, 'On the topology of stable Lagrange mappings with singularities of types A and D '
Sergey Shadrin, 'A correspondence between Hurwitz numbers and moduli of curves'
András Szenes, 'Thom polynomials and localization'
Farid Tari, 'Curves and surfaces in the Minkowski space'

In addition, Donal O'Shea delivered a Public Lecture on the subject 'The Lure of Singularity Theory'.

Slides from some of the plenary and other lectures are available on the workshop's webpage <http://www.icms.org.uk/workshop.php?id=285>

Special thanks are due to the ICMS for their excellent organization. In particular we thank the Centre Manager Jane Walker and Helene Frössling who was the Conference Coordinator at that time. We also gratefully acknowledge financial support for the workshop, from the ICMS (via the Engineering and Physical Sciences Research Council), the London Mathematical

¹Proceedings of the First Workshop on Singularities in Generic Geometry and Applications, *Topology and its Applications* **159**, issue 2, 2012.

²Proceedings of the Second Workshop on Singularities in Geometry and Applications, *Journal of Singularities* Volume 6, 2012.

Society and, for three young researchers, from the UK-based Institute of Mathematics and its Applications.

Fifteen of the speakers have now presented their work in a written form, as research article, survey or exposition. We are grateful to the participants for their assistance in the refereeing process and to the editors of the Journal of Singularities for making possible this special issue containing some of the tangible outcomes of the workshop in Edinburgh.

Jean-Paul Brasselet
Peter Giblin
Victor Goryunov
January 2015

List of Participants

Alharbi, Fawaz
Alonso-González, Clementa
Alsaeed, Suliman
Barbosa, Jose Camilo
Batista, Erica
Bin Turki, Nasser
Borodzik, Maciej
Brasselet, Jean-Paul
Bruce, Bill
Chen, Liang
Chillingworth, David
Christensen, Sabrina Tang
Domitrz, Wojciech
Donelan, Peter
du Plessis, Andrew
Ebeling, Wolfgang
Ferreira Costa, João Carlos
Giblin, Peter
Goryunov, Victor
Grandjean, Vincent
Haddley, Joel
Hernandes, Marcelo
Ishikawa, Goo
Izumiya, Shuichi
Janeczko, Stanisław
Karpenkov, Oleg
Kong, Lingling
Kucharz, Wojciech
Kushner, Leon
Libgober, Anatoly
Lönne, Michael
Ludwig, Ursula
Machida, Yoshinori
Manoel, Miriam
Marar, Ton
Martin, Bernd
Martins, Rodrigo
Mendes de Jesus, Catarina

Mizota, Yusuke
Mond, David
Moya Pérez, Juan Antonio
Némethi, András
Nishimura, Takashi
Nuño-Ballesteros, Juan José
O'Shea, Donal
Okuma, Tomohiro
Oset Sinha, Raúl
Pei, Donghe
Peñafort, Guillermo
Popescu-Pampu, Patrick
Pratoussevitch, Anna
Ranicki, Andrew
Reeve, Graham
Riley, Heather
Rimanyi, Richard
Roczen, Marko
Rodrigues Hernandez, Maria Elenice
Romero Fuster, Maria Carmen
Saia, Marcelo
Sanabria Codesal, Esther
Scherbak, Inna
Sedykh, Viacheslav
Shadrin, Sergey
Siersma, Dirk
Sigurðsson, Baldur
Stevens, Jan
Szenes, András
Takahashi, Masatomo
Tari, Farid
Tomaru, Tadashi
Uribe-Vargas, Ricardo
Wall, Terry
Wang, Zhigang
Weber, Andrzej
Webler Martins, Claudete Matilde
Yukuno, Wataru