**British Singularity Day   
Mathematics Institute, Warwick**

**7 November 2013**

Programme

12:00-13:00 Lunch, Common Room

13:00-14:00 Room MS05

Washington Luis Marar (Sao Carlos, SP, Brazil)

*Sections of corank 1 germs*

14:00-15:00 Room B1.01

Juan Jose Nuno-Ballesteros (Valencia)  
*Equisingularity of families of Isolated Determinantal Singularities*

15:00-15:30 Tea, Common Room

15:30-16:30 Room MS05

Guillermo Penafort (Valencia)

*Multiple points of map-germs*

The LMS Scheme 3 grant 31230 will pay reasonable travel expenses for participants from within the UK. Graduate students are especially welcome.

**ABSTRACTS**

**Washington Luiz Marar**

Normal forms of corank 1 maps f(x,y)=(x,p(x,y),q(x,y)) suggest, at least  
in some cases, that they could be seen as 1-parameter unfoldings of the  
plane curves f\_0(y)=(p(0,y),q(0,y)). If a certain genericity condition  
is satisfied then the transverse slice curve f\_0 contains information  
on the geometry of f. We introduce invariants C,J,T related to the Reidemeister moves (codimension 1 transitions) that appear in a stable perturbation of f\_0 and relate them to Mond's invariants of f. Some results on the geometry of the map germ f include: f is finitely determined if and only if C,J,T are finite. (Joint work with J.J. Nuno-Ballesteros).

**Juan Jose Nuno-Ballesteros**

We study necessary and sufficient conditions for a family of isolated  
determinantal singularities to be Whitney or topologically equisingular. The  
topological triviality of the family is related to the constancy of the  
vanishing Euler characteristic and Whitney equisingularity is characterized in  
terms of the constancy of the polar multiplicities. We generalize the results  
of Lê-Ramanujam and Teissier for hypersurfaces and the results of Gaffney forcomplete intersections. (Based on joint work with B. Oréfice-Okamoto and J. N. Tomazella)

**Guillermo Penafort**

In 1986 D. Mond introduced two ideals which define double-points of map germs and showed equality between them in the corank 1 case. In this work we prove their equality in different situations, show a counterexample of their  
equality and extend one of them to define multiple-points (of any multiplicity)  
of map-germs of any corank, possibly with singular domain.