A Final Report on:

Games-at-Dal 4

The Workshop took place 21-25 August, 2006. The focus was on misère games.

On the first day, Drs R. Dawson, S. Faridi, P. Selinger and D. Pronk, members of the category theory and algebra group accepted our invitation to attend. Dr. Selinger gave an impromptu talk on co-induction. Otherwise, the attendees were Drs Grossman, Plambeck, Nowakowski and Wolfe, and graduate students M. Allen, A. Hill, N. Mckay, P. Ottaway, and A. Siegel.

There are two winning conventions: in normal play, the first player who has no move loses, whereas in misère play the first player who has no move wins. Under both play conventions. In the seminal books of combinatorial games – *On Numbers and Games* by Conway and *Winning Ways* by Berlekamp, Conway and Guy – it is mentioned that misère games are harder to analyze than normal play games. A survey of the literature reveals only a few papers on misère play and these are either devoted to the analysis of a single game or to a restricted class of games. Two years ago, Plambeck made a major step forward in analyzing impartial misère games. The theme of the Workshop was to have Plambeck present the ideas in the first day and then explore them further over the rest of the week.

M. Allen and A. Siegel are both starting their PhDs on misère games. Ms Allen's topic is 'quotients of misère impartial games' and Ms Siegel's is 'misère partisan subtraction games'. The Workshop was an excellent and high-level introduction to the subject.

I wish to thank AARMS for the support of the Workshop. The financial support was greatly appreciated.

Dr. Richard Nowakowski