Christopher Cox (cocox@andrew.cmu.edu), Jessica De Silva* (jessica.desilva@huskers.unl.edu), Philip DeOrsey (pdeorsey@ehc.edu), Franklin H.J. Kenter (franklin.h.kenter@rice.edu), Troy Retter (tretter@emory.edu) and Josh Tobin (rjtobin@ucsd.edu). How to Make the Perfect Fireworks Display: Two Strategies for Hanabi.

A participant’s perspective is given on the mathematical, professional, and social components of GRWC, as well as results on a research project with a unique origin. One of many traditional social festivities at GRWC is game night, where we played a cooperative card game known as Hanabi. A few games and strategic conversations later, Hanabi became its own research project. In Hanabi, a player can not see the cards in her hand, and must rely on the actions of the other players to gain information about her cards. Based on ideas used in hat guessing games, we developed two strategies for Hanabi which performed well in computer simulations. (Received September 17, 2015)