Some Networks Generated by Chess Games

Kristijan Breznik and Vladimir Batagelj

At the Fide (world chess federation) web site data on the results of games and tournaments are available; from January 2008 on the single game level. From these data some (temporal) networks can be obtained. Additional data about chess players (rating, age, gender, country, title, ...) are also available.

Some chess players presume that the best players of the world are almost exclusively playing between themselves, avoiding to play against low rated opponents in order to keep their high Elo chess rating - they mainly play in closed, also called berger, tournaments. Another interesting question is how much the result of the game depends on the color of pieces. It is obviously harder to win a chess game with black pieces, but in the Elo system this is not considered in evaluation of the result. In the paper we deal with these and some other similar questions on the basis of data from Fide base using network analysis.

The programs for collecting the data from the Fide web site and producing networks were written in R. For analysis of networks we used Pajek.