

MoGo vs Motoki Noguchi

9x9 Go



Organized by the LLAIC (Clermont-Ferrand, France)
with the help of the Go club of Clermont-Ferrand

The LAIC laboratory, in Clermont-Ferrand (France) and the Go club of Clermont-Ferrand, organized a Go and computer-Go event in the "IUT de Clermont-Ferrand".

After a seminar day, Go initiation afternoon, and computer-Go / Go discussions (December 11th), there were games between a very high level human player, Motoki Noguchi, and a french computer-Go program, MoGo.



Motoki Noguchi

Motoki Noguchi is 7th Dan for the french federation of Go (FFG), a level equivalent to the first professional Dan. He won the french championship 2008. Motoki is the author of a book "Le langage des pierres" (in french), Praxeo, 2007.

MoGo

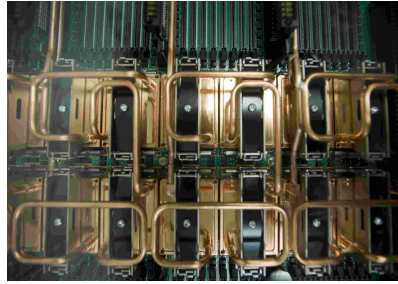
MoGo, result of a collaboration Inria/Cnrs/Lri/Univ. Paris-Sud/Univ. Maastricht/Pascal2/Digiteo,

has won the international Hakone GPW cup, the Taiwan International Computer-Go championship, and realized the first ever win against a professional player in 9x9 Blitz (Amsterdam, 2007), the first ever win against a professional player in 9x9 (IAGO tournament, Paris, 2008), the first ever win against a professional player in 19x19 Go with handicap 9 (Portland, US-Open, 2008); MoGo also won a homolated game in Taiwan against a 4D amateur player in 2008 (Taiwan Invited Games of Computer-

```
MPI_Allreduce(sharedData,sharedData2,4*cinqCents,MPI_NUMBER);
for (int j=0;j<4*cinqCents;j++)
    sharedData2[j]/=double(MPI_NUMBER);
}
double t2 = MPI_Wtime();
mpi_stats_allreduce_time += t2 - t1;
mpi_stats_allreduce_nb++;

if (node==playerTree->getRootNodeAddress())
{
    mpi_stats_allreduce_nb_for_this_move++;
}
```

Go, NUTN, 2008). MoGo was running on Huygens, a cluster provided by Sara/NCF (Nederlands); 20 nodes of 32 cores (Ibm Power6) were used for the normal games (30 minutes per side), and one node of 32 cores for the blitz games.

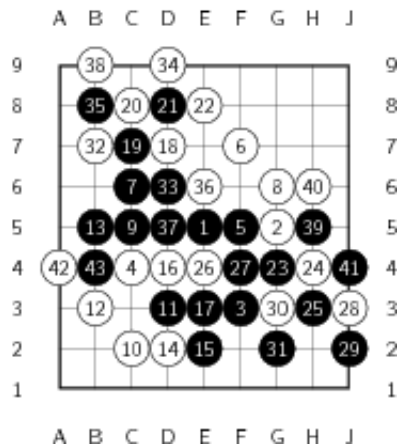


Above, the water cooling system of the supercomputer Huygens.

The games

First, Motoki and MoGo played 4 games in 9x9, with 30 minutes sudden death per side. MoGo lost the two first games and won the two last ones, leading to a 2/2 result. Motoki made a mistake in TODOth game, otherwise it was possible to keep alive a significant group (with a Seki situation), sufficient for winning. The four games are presented below.

blackWins



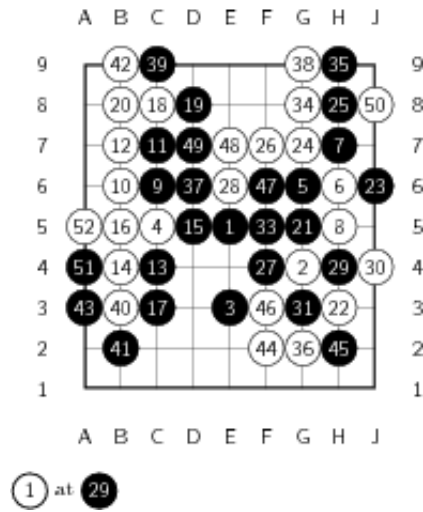
Black (Motoki Noguchi) wins. Below, the (important) situation after move 9,



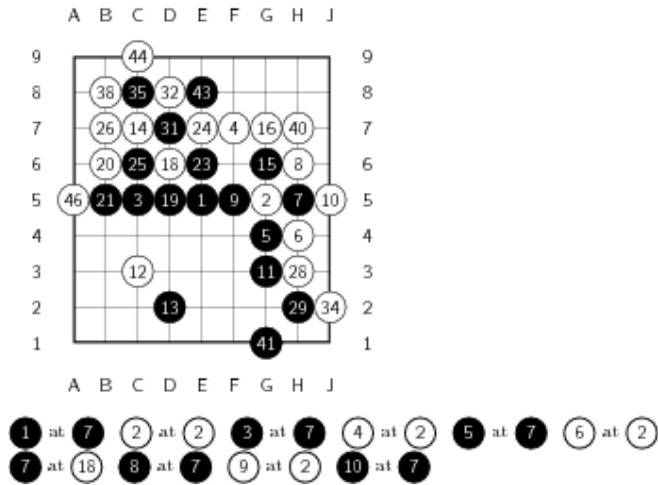
analyzed by Motoki.

White (Motoki Noguchi) wins.

whiteWins



whiteWins



White (MoGo) wins after a ko-fight (involving G5 and D6).

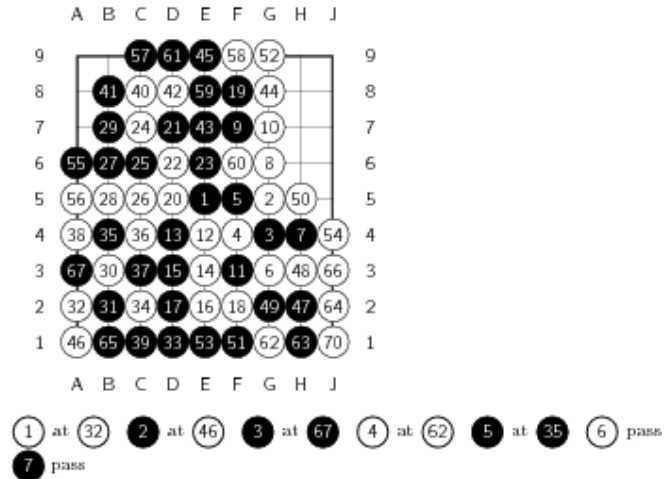
Below, the situation after move 14 under analysis by Motoki.



Black (MoGo) wins.

White group in the lower left part died; Motoki explained that without a mistake of white in this part, a seki would have given a few more points to white, sufficient for winning.

blackWins



Motoki pointed out that the sequence 55 / 75 / 74 / 64 / 65 / 73 / 84 / 76 / 67, often chosen by MoGo as white, is good, but that MoGo does not always find the good moves after that.

Then Motoki and MoGo played 4 blitz games (5 minutes per side, sudden death), and Motoki won 3 of these 4 games, in spite of the fact that Motoki played original openings for fun - this suggests that in blitz winning is easier for Motoki as he managed to win whenever he played strange initial moves.

Finally, MoGo played simultaneous games against Go amateur players and was undefeated in those games.

Several people from the LLAIC and the Go club of Clermont-Ferrand.

