ICGA 1

## Golois wins Phantom Go tournament

Tristan Cazenave <sup>1</sup> Shi-Jim Yen <sup>2</sup> Cheng-Wei Chou <sup>3</sup>

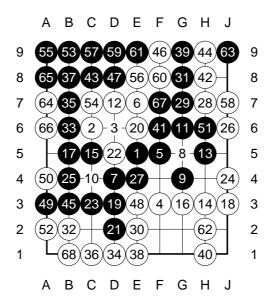
There were two participants for Phantom Go at the 2013 Computer Olympiad in Yokohama. Phantom Go is a variation on Go where you do not see the opponent moves, it is only when you play an illegal move or when stones are captured that you discover the opponent position.

The two programs that participated were NDHUPHANTOMGO by Cheng-Wei Chou and Shi-Jim Yen , from NDHU, Taiwan, and GOLOIS by Tristan Cazenave from University Paris-Dauphine, France.

NDHUPHANTOMGO uses MCTS, pattern matching and rules. Patterns are matched on each empty point and rules help finding the strings when stones are captured and avoiding playing on the first line in early stage of the game.

GOLOIS uses raw Monte Carlo to choose its moves.

GOLOIS won all of its eight games against NDHUPHANTOMGO. GOLOIS was awarded the gold medal and NDHUPHANTOMGO the silver medal.



Game two: GOLOIS is black

In most of the games, GOLOIS used a splitting strategy. It consists in dividing the board in two with a wall of stones and claiming one of the two sides by preventing any life for the opponent in it.

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