

## **RULES FOR THE 19<sup>th</sup> WORLD COMPUTER-CHESS CHAMPIONSHIP**

**Tilburg, The Netherlands**

**November 18-26, 2011**

The Board of ICGA

The 19<sup>th</sup> World Computer-Chess Championship will take place from November 18-23, 2010 in Tilburg, The Netherlands. We are grateful to the Board of Tilburg University, Tilburg center of Cognition and Communication (TiCC) and NBrIX that they would like to organize the three events in cooperation with the ICGA, viz. the 19<sup>th</sup> WCCC (and the 3<sup>rd</sup> WCSC; 24-26 November), the 16<sup>th</sup> Computer Olympiad (19-26 November), and the 13<sup>th</sup> Advances in Computer Games Conference (ACG13) (20-22 November). The location: The Red Brick, Professor Verbernelaan 35, Tilburg, The Netherlands. For a proper understanding of the competition we recall that the Maastricht Triennial Meeting in 2002, i.e., the first ICGA meeting (instead of ICCA), decided that the WCCC should be held annually without distinguishing any type of machines. The observation was clear: all kinds of differences between microcomputers, personal computers, “normal” computers, and supercomputers were in some sense obsolete and the classification thus was considered artificial. So was the division into the classes of single processors and multiprocessors.



The venue: The Red Brick

Another division which is continuously in discussion is that between amateur and professional. Is not the real amateur a professional? Or the other way round? For organizational matters we have kept this difference, since for amateurs the cost of travelling and housing is already expensive. Being treated as a professional may be agreeable, but if you have to pay for it then it might be less agreeable. As in previous years we have maintained three groups here, viz. the amateurs, the semi-professionals, and the professionals. The ICGA is continuing its policy on this point (but see below). We will adapt the definition of the first two classes.

Following the survey conducted amongst chess programmers after the tournament in Pamplona, the ICGA announced the inauguration of a new tournament for 2009 and subsequent years - The World Chess Software Championship (WCSC). The full details that apply in Tilburg 2011 are as follows.

[i] The World Computer Chess Championship (WCCC) for the Shannon Trophy will be contested by teams who have no restriction placed on them as to their choice of hardware.

[ii] The “World Chess Software Championship” (WCSC) tournament will be held at the same location, after the WCCC. This will be a uniform platform event using computers loaned by the host organisation. In each game played in this tournament the two computers will be, so far as is possible, identical with respect to their hardware capabilities: number of cores, processor speed, memory size.

[iii] Participants may compete in either or both of these tournaments for a single entry fee.

[iv] The time control for the WCCC will be such as to aim for a 4-hour playing session, namely all moves in 1 hour 45 minutes plus an increment of 15 seconds per move.

[v] The time limit for the WCSC will be such as to aim for a 2-hour playing session, namely all moves in 45 minutes plus an increment of 15 seconds per move.

[vi] The WCCC will be a 9-round Swiss System event if there are more than 12 entries, otherwise an all-play-all event.

[vii] The number of rounds for the WCSC will be decided according to the number of entries but there will be at least 9 rounds in the WCSC, if there are at least 10 entries; otherwise the WCSC is an all play-all event.

[viii] There will be a World Computer-chess Speed Championship.

[ix] There will be no excursion.

Below we provide the rules for the 19<sup>th</sup> World Computer-Chess Championship and for the 3<sup>rd</sup> World Chess Software Championship. It was agreed at the Maastricht meeting that from the 13<sup>th</sup> World Computer-Chess Championship onwards the Shannon Trophy will be awarded annually. The original trophy is kept at ICGA headquarters in Tilburg, and each year a replica of the trophy is presented on a permanent basis to the World Computer-Chess Champion team. A trophy will be given each year to be retained by the winner of the World Chess Software Championship.

Below, we have split the rules into sections of general rules and sections of tournament rules.

#### **GENERAL RULES – WORLD COMPUTER-CHESS CHAMPIONSHIP**

1. The World Computer-Chess Championship 2011 is the 19<sup>th</sup> in a series of World Computer-Chess Championships. It follows the tournament rules given below.
2. The tournament will be an 9-round Swiss-system event, using standard (non-accelerated) Swiss pairings, if there are more than 12 entries. The provisional playing schedule is announced on the following website: [www.grappa.univ-lille3.fr/icga/event\\_info.php?id=43](http://www.grappa.univ-lille3.fr/icga/event_info.php?id=43).
3. The winner of the Tournament will be awarded (1) a replica of the Shannon Trophy, and (2) the title of World Computer-Chess Champion 2011. No other titles following from the results of this tournament will be awarded. (Hence, no Amateur title, no Microcomputer title, and no single-processor title, as well as no multi-processor title.)
4. There will be a separate 9-round Swiss tournament for a permanent trophy and the title World Computer Speed Chess Champion.
5. Unless otherwise specified, rules of play are identical to those of human tournament play. In particular this holds for claiming a draw with respect to the three-times-repetition rule (see *ICGA Journal*, Vol. 28, No. 1, News section). If a point is in question, the Tournament Director has the right to make the final decision (with due deference to the Committee of Appeal).
6. Each game is played on a chessboard with a chess clock provided by the Tournament Committee.
7. At the end of each game, both teams are required to send in a game listing to the Tournament Director in electronic (PGN) form.
8. The Tournament Director will be Professor H. Jaap van den Herik. He has the power to designate assistants with the appropriate power to decide in cases of dispute.
9. In the event of any rule disputes, or changes necessitated by circumstances at the time, the Tournament Director's decision shall be final (with due deference to the Committee of Appeal).
10. The members of the Appeal Committee will be agreed upon during the participants' meeting on November 19, 2011.

11. The entry fees for the 19<sup>th</sup> WCCC (**inclusive of membership fee** of the ICGA for 2011 for one person) are as follows:
- |                              |   |
|------------------------------|---|
| Fresh Amateur:               | € 80 for the first and second year of participation         |
| Amateur / Semi-professional: | € 100 for the third year of participation and further years |
| Professional:                | € 540   |

The definitions are changed with respect to last year. They read as follows.

“Fresh Amateur”: programmers who have no commercial interest in their program, and are participants for the first or second time. The lower price is meant to attract new academic researchers and new “real” amateurs. Please note, the program’s name must not be derived from or similar to a commercial product. Applicants for the amateur classification are obvious by participation in previous years.

“Amateur / Semi-professional”: Any third-year and higher-year participant. The program’s name must not be derived from or similar to a commercial product.

“Professional”: A program of which the name is the same as or derived from a commercial product.

**Entry forms are available at <http://www.grappa.univ-lille3.fr/icga/>**

The acceptance or rejection of an entry will be determined by the ICGA President in consultation with the Tournament Director. Notification of acceptance will be given as soon as possible, and in any event not later than September 30, 2011, provided of course that the entry is received in due time.

#### **GENERAL RULES – WORLD CHESS SOFTWARE CHAMPIONSHIP**

1. The World Chess Software Championship follows the tournament rules given below.
2. The tournament will be a 9-round Swiss-system event, using standard (non-accelerated) Swiss pairings. The provisional playing schedule is announced on the ICGA website.
3. The winner of the Tournament will be awarded (1) a trophy, for keeping permanently, and (2) the title of World Chess Software Champion 2011.
4. Unless otherwise specified, rules of play are identical to those of human tournament play. In particular this holds for claiming a draw with respect to the three-times-repetition rule (see *ICGA Journal*, Vol. 28, No. 1, News section). If a point is in question, the Tournament Director has the right to make the final decision (with due deference to the Committee of Appeal).
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7. The Tournament Director will be Professor H. Jaap van den Herik. He has the power to designate assistants with the appropriate power to decide in cases of dispute.
8. In the event of any rule disputes, or changes necessitated by circumstances at the time, the Tournament Director’s decision shall be final (with due deference to the Committee of Appeal).
9. The members of the Appeal Committee will be agreed upon during the participants’ meeting on November 25<sup>th</sup>, 2011.
10. The entry fees for the WCSC (inclusive of membership fee of the ICGA for 2011 for one person) are as follows.

For programs that are also participating in the 19<sup>th</sup> World Computer-Chess Championship and have paid the appropriate entry fee for that tournament, no charge.

For other programs the entry fees, definitions and payment requirements are all as in rule 11 for the World Computer-Chess Championship.

**Entry forms are available at <http://www.grappa.univ-lille3.fr/icga/>**

The acceptance or rejection of an entry will be determined by the ICGA President in consultation with the Tournament Director. Notification of acceptance will be given as soon as possible, and in any event not later than September 30, 2011, provided of course that the entry is received in due time.

### 19<sup>th</sup> WORLD COMPUTER-CHESS CHAMPIONSHIP TOURNAMENT RULES

1. Each entry is a computing system and one or more humans who programmed it, the bookmakers included. In the computer system there is no restriction on the hardware. At least one of the program developers should attend the WCCC to operate the program, otherwise the entry fee for the program is doubled.
2. Each program must be the original work of the entering developers. Programming teams whose code is derived from or including game-playing code written by others must name all other authors, or the source of such code, in the details of their submission form. Programs which are discovered to be close derivatives of others (e.g., by playing nearly all moves the same), may be declared invalid by the Tournament Director after seeking expert advice. For this purpose a listing of all game-related code running on the system must be available on demand to the Tournament Director.
3. A program may have one or more opening book makers (or specialists) in their team. Any book maker may belong to only one team.
4. Participants are required to attend an organizational meeting on November 19, 2011 prior to the start of the tournament for the purpose of officially registering for the tournament. Operational rules will be finalized at that meeting.
5. The format of each tournament and the rate of play will generally be determined by the Tournament Director according to the number of programs entered and any other relevant factors. The 19<sup>th</sup> World Computer-Chess Championship (WCCC) is assumed to be a Swiss-system event with 11 rounds in which the rate of play will be all moves in 1 hour 45 minutes plus an increment of 15 seconds per move.
6. An operator error made when starting a game or in the middle of a game can be corrected only with the approval of the Tournament Director. If an operator enters an incorrect move, the Tournament Director must be notified immediately. Both clocks will be stopped. The game must then be backed up to where the error occurred. Clocks will be corrected and the settings at the time when the error occurred will be reinstated using whatever information is available. Both sides may then adjust their program parameters with the approval of the Tournament Director. The Tournament Director may allow certain program parameters to be changed.
7. All monitors must be positioned so that the operator's activities are clearly visible to the opponent. An operator may only: [a] enter moves, [b] respond to a request from the computer for clock information, and [c] synchronize the computer clock to the normal chess clock. Misuse of this rule will be punished by the Tournament Director. If an operator needs to enter other information, it must be approved ahead of time by the Tournament Director. The operator may not query the system to see if it is alive without the permission of the Tournament Director.
8. A team must receive permission from the Tournament Director to change from one computing system to another.
9. Tie-breaking: (a) if precisely two participants are tied for first place, two play-off games of one hour per side are to be played. At the longest, such a match may take four hours. Should that match be drawn, then one sudden death<sup>1</sup> game should be played (White 12 minutes, Black 10 minutes); (b) whenever two or more teams have an equal number of points, a tie-ranking order is defined as follows. The dominant ranking is by the sum of the opponents' scores. If there is still a tie, the sum of the respective programs' cumulative scores after each round (i.e., score after round-1 + score after round-2 + .... + score after last-round) will be used; (c) if three or more participants are tied for first place, then the two participants ranked most highly are to be determined by the tie-ranking order in (b). This pair of participants then play off as in (a)
10. For the play-off procedure for the first place as given in rule 8, the colour assignment is as follows. In the first match game the colours are reversed with respect to the game played in the tournament. In the sudden-death game the following rules apply: (1) if possible, the colour division in the tournament (play-off match inclusive) will be settled at 7 - 7; if this is impossible then (2) the colours of the game played in the tournament will be reversed.

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<sup>1</sup> The outcome of a sudden-death game is defined as follows. White wins the sudden-death game if White wins the game, otherwise Black wins.

## 2011 WORLD CHESS SOFTWARE CHAMPIONSHIP TOURNAMENT RULES

The tournament rules for this championship are the same as for the WCCC with due substitutions and except for the following.

Rule 2 should be read as follows.

The format of the tournament is assumed to be a Swiss-system event with 9 rounds in which the rate of play will be all moves in 45 minutes plus an increment of 15 seconds per move. Rules 4 and 5 are not applicable.

### THE 16<sup>th</sup> COMPUTER OLYMPIAD

The Computer Olympiad is the 16<sup>th</sup> in its series. The Computer Olympiad is a multi-games event in which all of the participants are computer programs. The purpose is to find the strongest programs at each of the games, partly as an academic exercise and partly because the competitions are fun. In Table 1 we mention 36 different games for which a program can be submitted to the Olympiad.

Abalone	Go 19x19
Amazons	Havannah
Arimaa	Hex
Backgammon	Kriegspiel
Bao	Light Up
Bridge	Lines of Action
Chinese Chess	Nonogram
Chinese Dark Chess	Nurikabe
Clobber	OCTI
Computational Pool	Othello
Connect6	Phantom Go
Diplomacy	Poker
Dominoes	Quoridor
Dots and Boxes	Scrabble
10x10 Draughts	Stratego
Gipf	Shogi
Go 9x9	Shogi 5x5
Go 13x13	Surakarta

We are willing to host more games, such as Ataxx, Dvonn, Mediocrity, Onyx, Tamsk, TwixT, and Zèrtz, but we do not know of the existence of adequately playing programs. We are awaiting suggestions and proposals of programmers before we include them in the official list given in Table 1.

For each game, a tournament will take place provided that at least two programs enter the tournament for that particular game. Gold, Silver, and Bronze medals will be awarded to the leading programs in each tournament.

The Tournament Director of the Computer Olympiad will be: H.J. van den Herik. The envisaged Assistant Tournament Directors are: H. Iida and I-C. Wu (Go).

**Table 1:** Games played at the Computer Olympiad.

The entry fees for the Olympiad tournaments are as follows.

Fresh Amateur:	€ 80 (1 year membership ICGA included)
Amateur / Semi-professional:	€ 100 (1 year membership ICGA included)
Professional:	€ 290 (1 year membership ICGA included)

The definitions are the same as for the WCCC on p. 114.

Deadline early registration: October 12, 2011. Any entry received after October 12, 2011 will be subject to a penalty fee, doubling the above fee.

Website: <http://www.grappa.univ-lille3.fr/icga/>