RULES FOR THE 2019 WORLD COMPUTER CHESS CHAMPIONSHIP TOURNAMENTS

Macau, August 11th-16th 2019

The Board of ICGA

This year the ICGA's three World Chess Championship tournaments for computer programs will take place in the convention center of the Venetian Macau Hotel Resort, in Macau, during the period August 11th-16th 2019. For the second successive year our events will be held alongside the IJCAI annual Conference (see https://www.ijcai19.org/). In addition the ICGA's own games conference will be taking place during this period (see https://icga.org/?page_id=2679).

The three tournaments are: the World Computer Chess Championship (August 13th-16th), the World Chess Software Championship (August 11th-12th), and the World Computer Chess Speed Championship (games interspersed during the whole period). A maximum of 8 programs will be accepted to take part in each tournament. All entries must be "original" programs in accordance with Tournament Rule 2 below.

We are grateful to the International Joint Conference on Artificial Intelligence (IJCAI), alongside which these ICGA events will be taking place.

A subsidy towards the travel and accommodation costs of the participants will be made by the ICGA. The amount of this subsidy will be € 1,500 for programs rated 3,000 or above in the March 2019 SSDF or CEGT rating list. For programs rated below 3,000 but at least 2,500 the subsidy will be €750. In order to qualify for the full subsidy participating program must compete throughout both of the WCCC and the WCSC. A program competing in just one of those tournaments will receive half of the corresponding subsidy.

In addition to the travel subsidy, there is also a prize fund totalling € 5,000, thanks to an anonymous donor to whom the ICGA is extremely grateful. The prizes will be as follows (all amounts are in Euro):

World Computer Chess Championship:
First 1,500; Second 500; Third 250.

World Chess Software Championship (Uniform platform event):
First 1,500; Second 500; Third 250.

World Computer Chess Speed Championship:
First 350; Second 100; Third 50.

Here we provide the rules and other information on all three world championships.

Entry forms are available at www.icga.org

GENERAL RULES – WORLD COMPUTER CHESS CHAMPIONSHIP (WCCC)

1. The World Computer-Chess Championship 2019 is the 25th in a series of World Computer-Chess Championships. It follows the "Tournament Rules" given below.

2. The tournament format will be all-play-all. The provisional playing schedule is announced here and on the ICGA web site.

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 2019. There will also be a cash prize. The original of the Shannon Trophy is kept permanently at ICGA headquarters in the Netherlands.

4. Unless otherwise specified, the rules of play are identical to the latest release of the FIDE laws of Chess. 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 respect to the Committee of Appeal).

5. Each game is played on a chessboard with a chess clock provided by the Tournament Committee.

6. At the end of each game both teams are required if requested to send in a game listing to the Tournament Director in electronic (PGN) form. In case of DGT boards only by request of the Tournament Director.

7. The Tournament Director will be Jan Krabbenbos. He has the power to designate assistants with the appropriate power to decide in cases of dispute. The assistant Tournament Director will be David Levy.

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 respect to the Committee of Appeal).

9. The members of the Appeal Committee will be agreed upon during the participants' meeting on August 12th 2019.

10. The entry fee for the 25th WCCC is € 50. In addition, at least one member of each team must be a member for 2019 of the ICGA (on-line membership fee € 20).

Entry forms are available at www.icga.org

The acceptance or rejection of an entry will be determined by the ICGA President in consultation with the Tournament Director on June 15th 2019. Applicants who apply to register on or after June 15th will be notified as soon as possible regarding the acceptance or otherwise of their application. Any entry received on or after June 15th 2019 will be subject to a penalty, doubling the € 50 entry fee.

<u>GENERAL RULES</u> – WORLD CHESS SOFTWARE CHAMPIONSHIP (WCSC)

1. The World Chess Software Championship 2019 is the 9th in a series of World Chess Software Championships. It follows the "Tournament Rules" given below.

2. The tournament will be an all-play-all tournament if there are maximal 8 participants. The provisional playing schedule is announced here and on the ICGA website. If the number

of participants is four or less a double all-play-all tournament is played. If the number of participants is above 8 the tournament will be a 7-round Swiss tournament.

3.   The winner of the Tournament will be awarded (1) a trophy, for keeping permanently; (2) the title of World Chess Software Champion 2019. There will also be a cash prize, the amount to be announced in due course.

4-9.   Identical to the General Rules of the WCCC.

10. The entry fee for the WCSC is € 50 if it is the participant's only tournament. If the participant is also in the WCCC then their entry fee for the WCSC will be € 25. In addition, at least one member of each team must be a member for 2019 of the ICGA (on-line membership fee € 20).

Entry forms are available at www.icga.org

The acceptance or rejection of an entry will be determined by the ICGA President in consultation with the Tournament Director on June 15th 2019. Notification of acceptance will be given as soon as possible, as per the conditions for the WCCC.

25th WORLD COMPUTER CHESS CHAMPIONSHIP TOURNAMENT RULES

1.   Each entry is a computing system and one or more humans who programmed it. 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 (i.e., for operators who are not developers of the program they are operating) the entry fee for the program is doubled.

2.   Each program must be the *original* work of the entering developers, possibly with the inclusion of game playing code and/or data from other sources for which the entering developers have a legal right of use. Developers whose code is derived from or includes (1) game-playing code; and/or (2) data written by others, must name (a) all the other developers of whom they are aware; and (b) the source of such code and/or data, in their tournament registration details.

   Programs which are discovered to be undeclared derivatives of others may be designated invalid by the Tournament Director if he is convinced, after seeking advice if he feels that to be necessary, that the closeness of derivation is of such a level as to constitute unfair competition. A listing and an executable version of all game-related code and data running on the system must be available on demand to the Tournament Director prior to the start of and during the tournament. The Tournament Director has the right to submit the executable version of a program for testing for similarity with other known programs, and/or to submit the listing to an expert or experts of his choosing for examination, also to determine similarity. Under all circumstances the Tournament Director will take all reasonable steps to ensure that any such listing and/or executable are treated as being strictly confidential.

The entering developers must keep a copy of the source code of their entry until at least one year following the date of conclusion of the tournament, in order to be able to respond accurately to any questions about the source code that might be raised after the event by the Tournament Director.

In case you are using neural networks in any form, we request participants to inform the organisation about the way the neural networks are being used in the program.

3. Participants are required to attend an organizational meeting on August 10, 2019 prior to the start of the tournament for the purpose of officially participating in the tournament. Operational rules (such as members of the Committee of Appeal) will be finalized at that meeting.

4. The format of the tournament follows from rule 2 of the General Rules (WCCC). 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 25th World Computer-Chess Championship (WCCC) is assumed to be an all-play-all tournament in which the rate of play will be all moves in 1 hour 45 minutes plus an increment of 15 seconds per move. The increment starts at move 1, i.e., the clock should be used during opening-book play.

5. An operator may ask the Tournament Director to stop clocks at most twice during a game because of hardware problems or network problems. The operator can ask the Tournament Director for permission to restart the program. When restarting after a failure of any kind, the operator must reset all parameters as closely as possible to their values at the time the game was interrupted. Play must resume after at most a fifteen-minute delay. If operators using a remote computer can clearly establish that the network problems are not in their own computing system, but in the communication network, the Tournament Director can permit additional delay.

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] under supervision of the (assistant) Tournament Director 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 30 minutes plus 15 seconds per move per side are to be played. At the longest, such a match may take four hours. Should that match be drawn, then another two play-off games are to be played as given in the table below until there is a winner; (b) if more than two participants have an equal number of points, a tie-ranking order is defined as follows. The dominant ranking is by the Sonnenborn-Berger scores; c) the two participants ranked most highly by the tie-ranking order in (b) will then play off as in (a). An analogous tie-breaking procedure applies for establishing the second place and, if necessary, the third place.

Play-off Match	Time control
1 (2 games)	30 minutes plus 15 seconds per move
2 (2 games)	15 minutes plus 15 seconds per move
3 (2 games)	5 minutes plus 5 seconds per move
4 (1 game)	Armageddon, white 6 minutes plus 10 seconds per move, black 3 minutes plus 5 seconds per move

10. For the play-off procedure for the first place as given in rule 9, the colour assignment is drawn by lots before each of the matches played.

2019 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 4 should be read as follows.

The format of the tournament is assumed to be an all-play-all tournament (depending on the number of participants, see rule 2 of the General Rules WCSC), in which the rate of play will be all moves in 45 minutes plus an increment of 15 seconds per move. The increment starts at move 1, i.e., the clock should be used during opening-book play.

Rule 9 should be read as follows.

Tie-breaking: (a) if precisely two participants are tied for first place, two play-off games of 20 minutes plus an increment of 15 seconds per move are to be played. At the longest, such a match may take two hours. Should that match be drawn, then another two play-off games are to be played as given in the table below until there is a winner; (b) if more than two participants have an equal number of points, a tie-ranking order is defined as follows. The dominant ranking is by the Sonnenborn-Berger scores; (c) the two participants ranked most highly by the tie-ranking order in (b) will then play off as in (a). An analogous tie-breaking procedure applies for establishing the second place and, if necessary, the third place.

Play-off Match	Time control
1 (2 games)	20 minutes plus 15 seconds per move
2 (2 games)	10 minutes plus 10 seconds per move

3 (2 games)	5 minutes plus 5 seconds per move
4 (1 game)	Armageddon, white 6 minutes plus 10 seconds per move, black 3 minutes plus 5 seconds per move

2019 WORLD COMPUTER SPEED CHESS CHAMPIONSHIP

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

1. The tournament will be a double round all-play-all tournament if the number of participants is 6 or below.
2. The time limit for the 2019 World Computer Speed Chess Championship will be 5 minutes (+5s per move) per program per game.
3. An operator error (e.g., playing an illegal move) immediately leads to losing the game after the clock has been pressed.
4. Hardware problems and network problems are to be remedied in the allotted time frame.
5. The entry fee for the Speed Chess Championship is free provided that the program participates in either the WCCC or the WCSC.

Moreover, the rules 4, 5, 6, 7. 8, and 10 of the WCCC apply.

Rule 9 should be read as follows.

Tie-breaking: (a) if precisely two participants are tied for first place, two play-off games of 5 minutes plus an increment of 5 seconds per move are to be played. At the longest, such a match may take two hours. Should that match be drawn, then another two play-off games are to be played as given in the table below until there is a winner; (b) if more than two participants have an equal number of points, a tie-ranking order is defined as follows. The dominant ranking is by the Sonnenborn-Berger scores; (c) the two participants ranked most highly by the tie-ranking order in (b) will then play off as in (a). An analogous tie-breaking procedure applies for establishing the second place and, if necessary, the third place.

Play-off Match	Time control
1 (2 games)	5 minutes plus 5 seconds per move
2 (2 games)	5 minutes plus 5 seconds per move
3 (1 game)	Armageddon, white 6 minutes plus 10 seconds per move, black 3 minutes plus 5 seconds per move