## 23nd World Computer Chess Championships

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The $23^{\text {nd }}$ World Computer Chess Championship started on July 3, 2017. Four programs participate in a triple round robin tournament of nine rounds. The tournament takes place at the Leiden University and is organized by the ICGA, LIACS and LCDS. The sponsors are Oracle, the municipality of Leiden, Leiden University, Faculty of Science, ICGA, iSSC, SurfSara and Digital Game Technology. It is held in conjunction with the 7th World Computer Software Championship, $20^{\text {th }}$ Computer Olympiad and the $15^{\text {th }}$ Advances in Computer Games conference.

## Round 1

Jonny - Komodo $1 / 2-1 / 2$
Chiron - Shredder $1 / 2-1 / 2$
In the first round Jonny and Komodo played a game of high level. Up to move 13 it was taken from the book. Thereafter the strategic lines were set out. On move 20 white believed it could gain some space at the king side. However black was well prepared and replied with a well considered counter action. The sacrifice of a pawn was temporarily and meant to open the long diagonal to the white king. Yet the balance remained untouched and after many exchanges the draw was agreed in the end game.

Chiron played the opening in an original way. In any case the program made clear that Shredder should be alert from the beginning. Obviously it was and therefore a lively game was to be seen on the board. Both players are in the category of stronger than the human world champion. So they know very well what they are doing. For instance 38. ... f5 was a move which clearly showed aspirations, at least it would emphasize its influence in the center of the board. Blacks aggressive ideas also gave white opportunities to invade the black position. Both sides had their own attack and even here they managed that the game remained equal. At the moment white had a winning attack on pawn h6, black complete the game by repetition of moves.

Standings: 1-4 Komodo, Chiron, Jonny, Shredder 0.5.


4q1k1/6p1/p1p4p/P1P2p2/1P1R1Q1P/8/4r1P1/6K1 w--0 39

## Round 2

Komodo - Shredder 1-0
Jonny - Chiron $1 / 2-1 / 2$
Komodo played a sharp opening line in which the essence is a resultant midgame with a queen against three minor pieces. They followed the theory up to 13. Qg4. At that moment black has two continuations being 13. ... Kf8 or g6. Some prefer g6 but Shredder chose for Kf8. The main task for black was to develop its pieces and to activate its rooks.

r1b1k1nr/1pbp1ppp/2n1p3/8/4P1Q1/2P5/PP3PPP/R3KB1R b KQkq-1 13

To be precise black had three challenges to solve, namely 1 to complete an artificial castling, 2 to develop it rook on h8 and 3 to develop the white-squared black bishop on c8. The first challenge was easily solved. The second challenge was handled by playing h7-h5-h4 and developing the rook to h5. However on the fifth rank the rook could not find a stable place, but at least it was into play. That was not the case with the bishop on c8. White played in such way (developing pressing power on the queen side and fixing the black pawn on a6) that the black bishop was an obstacle for connecting the rooks. Black did not see any solutions for this challenge except for sacrificing a full piece (see diagram). White reacted accurately, took the piece, sacrifice the exchange and transferred the position into a advantageous position for white. The pawns on the queenside did the work by marching on to the promotion square. A well played game by Komodo. In such a strong field a victory against an opponent is very valuable.


1rb2rk1/1p4p1/1P2p3/P1P1R3/Q1B2n1p/6nP/6P1/6K1 b-- 240
Jonny - Chiron followed the Catalan opening line. It was a quiet positional fight. Both sides attempted to take the initiative but neither side was able to achieve any advantage. In an equal transition phase to the endgame there was an opportunity to transfer the game into an endgame with an unbalanced material relation. Again the queen was exchanged, this time for two rooks. It turned out to be a fair exchange since the power balance was not shifted. Finally the game ended in perpetual check. A deserved half point for both sides.

Standings: 1. Komodo 1.5 2-3. Jonny, Chiron 1 4. Shredder 0.5


8/p1q2pk1/1r3npp/Q1p1p3/2Pr4/1R2N1P1/P3PP1P/1R4K1 b - - 329

## Round 3

Chiron - Komodo $1 / 2-1 / 2$
Shredder - Jonny $1 / 2-1 / 2$
The French opening usually leads to closed positions. However Komodo was playing sharply and opened the g-file by playing 17. ... gxf4, 18. gxf4. With the white queen on d 4 and the black king on h 8 it enabled white to start a nice combination by 20. Nxd5 (see diagram). The sacrificed piece was gained back by a check by discovery 22 . e6+ and 23. exd7. The resulting position was still complex and Komodo tried to complicate matters even more. However white kept his computer brains cool and managed by sharp play to force black to give perpetual check.


Shredder - Jonny was a tough game that started quietly from a Semi Slav opening. The complication were never very deep and can be characterized as positional fights. Yet black tried to have the initiative and white was first to reply adequately. Both sides had their active and passive pieces. Facing the activities black seemed to be better. However white has positioned its pieces very well and soon as black did not have any threat white should unfold his intentions. This stimulated black to a repetition of moves.

Standings: 1. Komodo 2 (out of 3) 2-3. Jonny, Chiron 1.5 4. Shredder 1

## Round 4

Komodo - Jonny $1 / 2-1 / 2$
Shredder - Chiron $1 / 2-1 / 2$
The game Komodo - Jonny had everything to be an exciting contest. However Komodos hardware was not ready in time for the full game. So instead of playing with 60 cores it had to rely on 24 cores only. There was a similar repercussion for the opening book which now smaller than the usual opening book. So it could happen that Komodo followed a simple line in the Italian variation. Jonny playing black, followed the main line of the opening. On move 12 there was a repetition of moves which both programs accepted. A draw was the result and the spectators had to accept this.

The game Shredder - Chiron started as a Semi-Slav. It was a pleasure to see how both sides tried to take the initiative. White was active on the queen side, black in the center and a bit on the kingside. Both players kept in their memory the maneuvers of the opponent while performing their own activities. The game had a climax on move 46. e5 since that was the start of an indirect exchange of pawns. 46. ... Re7 (see diagram) 47. Qe4 Qxe5 48. Qh7+ Kf8 49. Dxh6+ Ke8 50. Qc6. White might have hoped to have some attack on the black king but it turned out that the result was check, check and check. So soon a draw was agreed.


6k1/1b2rp2/2p4p/1p2P1p1/8/1P2QPqP/R1B3P1/5K2 w--147
Standings: 1. Komodo 2.5 (out of 4) 2-3. Jonny, Chiron 2 4. Shredder 1.5.

## Round 5

Shredder - Komodo $1 / 2-1 / 2$
Chiron - Jonny $1 / 2-1 / 2$
Some games are exciting to play but not so exciting to be replayed by a spectator. With four top programs in this tournament that play all on a very high level we see regularly games that show equality of power and consequently not always complex attacks or inventive defences. In the game Shredder - Komodo both players went out of book on move 13 in an equal position. This status quo did not change during the next 60 moves. So it looks that chess is an easy game but is certainly not true. Every decision is well computed and evaluated. The draw that resulted after 73 moves was for nobody a surprise.

The game Chiron - Jonny started with an established opening variation from the past. The Dragon variation of the Sicilian Defense long time had a reputation of being a fighters opening. Over the years many good schemes for attack on the black position have been developed. In the game white tried to apply such a scheme but black was well prepared and took the right counter measures on all white's attempts to obtain some advantage. Although the fight direct under the surface might have been intense, the result looked like a cold game with many exchanges and almost no tension at all. The exchanges of many pieces seemed to be in harmony with the characteristics of the opening. Finally there existed a rook ending in which no side could aim for advantage. The draw was agreed after 62 moves.

Standings: 1 . Komodo 3 (out of 5) 2-3. Jonny, Chiron 2.5 4. Shredder 2.

## Round 6

Komodo - Chiron $1 / 2-1 / 2$
Jonny - Shredder $1 / 2-1 / 2$
Many spectators were surprised on the draw between Komodo and Chiron. Not the fact that the game ended in a draw - Chiron is a really good program -, but the way in which the draw happened. When asked to Erdogan Gunes (operator of Komodo) he answered "It happened", meaning that he accepted the opening line of the program and the repetition of moves as dictated by the opening book. For a reporter it is difficult to add something more since the draw was a direct result from the opening book.

The game Jonny - Shredder was one of a long row between the brainchilds of the two programmers Johannes Zwanzger and Stefan Meyer-Kahlen. This time they played the Semi-Slav, Meraner variation. They played both quietly and seriously attempting to obtain a small positional advantage. In the diagram position both sides have the pair of bishops, black has three groups of pawns, white two. Usually two is better but black's third group consisted of a passed pawn. The question is whether the passed pawn is strong or weak. Black saw an opportunity to look for a further endgame in which the passed pawn really could play a part. In the diagram position play continued by 21. ... Bxf3 22. Qxf3 Bxh2+ 23. Kxh2 Qd6+ 24.g3 Dxd3 25. Rfd1. In the end the c-pawn was neither an advantage nor a disadvantage. In the continuation both sides tried to find some new resources but adequate defense suppressed real aspirations for a win.

r2r2k1/4qppp/p1bb2n1/P1p5/8/2BBPN2/4QPPP/2R2RK1 b-- 021
Standings: 1. Komodo 3.5 (out of 6) 2-3. Jonny, Chiron 3 4. Shredder 2.5.

## Round 7

Jonny - Komodo $1 / 2-1 / 2$
Chiron -Shredder $1 / 2-1 / 2$

In the game Jonny - Komodo the issue of static evaluation versus dynamic evaluation came to surface. After a Closed Catalan opening the players arrived at the diagram position. The difficulty which such positions is the evaluation. The position can be assessed by a static evaluation or by a dynamic evaluation. Although both evaluations might have the same value, the way that value is reached will be completely different. We believe that the dynamic evaluation gives more insight in the intricacies of game but is not definitively the better evaluation. The following happened in this position: 14. ... cxb4 15. Qb3 Rc3 16. Qa3 bxa3 17. Nb1 Rc8 18. Nxa3. Black is a pawn up and has even two passed pawns. Yet there are many difficulties to overcome before black can think of a win.


2rqnrk1/pb1nbppp/1p6/2ppP3/1P1P4/P4NP1/2QN1PBP/R1BR2K1 b-- 014
In the following it looked that black played well, diligently and accurately to keep the win into reach. However when the position of diagram 2 occurred on the board Jonny's evaluation function had reached a 6-men endgame table base predicted that the game would end in a draw. There was some disbelief under the audience. They followed the course of the game with the eyes of an eagle. What happened in the game was the following: 33. Qxd7 Rxd7 34. g4 hxg4 35. Nxg4 Rd6 36. f7 Kg7 37. Ne5 Bd7. Apperently the program had looked for twenty plies deep and then touch upon the 6-piece database. Playing through the game it is not understandable for a human being to see that this game ends in a clear draw. Disbelievers among the readers of this reports are encouraged to replay the game in its entirely. They will see the nice draw which is in accordance with the actual game result.

r5k1/3qQr2/p1b1nPp1/Rp1p3p/3P3P/4N1P1/5PBK/3R4 w--2 33
A new observation in a tournament of high ranked programs is the tendency for a draw by repetition of moves. Apparently the programs are "stubborn" and remain in their tree search at the best move found so far. The contempt factor is not always in use in these programs. For Chiron we can say that it believed to the weakest program of the four and therefore it has put its contempt factor of +0.15 which means that it does accept repetition of moves even when it is 0.15 ahead. This may have been of influence in this game where the moves were repeated from move 26 onward.

Standings: 1. Komodo 4 (out of 7) 2-3. Jonny, Chiron 3.5 4. Shredder 3.

## Round 8

Komodo - Shredder $1 / 2-1 / 2$
Jonny - Chiron 1-0
The game Komodo - Shredder was a Sicilian variation different from their earlier contest in round 2. Now Shredder played 7. ... Nf6 instead 7 ... a6. The game followed the usual themes of the Sicilian variation. White gained some advantage. It turned out not to be sufficient for a winning attempt. The complications were mainly superficial although some deep structures may underlying the patterns that occurred to the eyes of the beholders. The game had a high level as all meetings in this class have nowadays. The resulting draw was acknowledges as such by both sides.

Jonny against Chiron was a Catalan opening. Black played active with its rook pawn at the kingside. In a real fight it is always essential to keep the position dynamic. That enables complex lines and combinations. However it is a well known rule that one should always take into account that the opponent can solve the dynamic elements by unexpectedly capturing a dynamic element and even destroying its own pawn structure. That was a decision Jonny took on move 27
by playing gxh4 (see diagram). The new $h$-pawn soon became a pain in the ass in the black position. White regrouped some of its pieces, progressed the $h$-pawn and started to make some complications around the black king (see diagram 2).


4r1k1/1b1rqpp1/1ppbpn2/p7/P1PP3p/1P3QP1/1BN2PBP/3RR1K1 w--8 27
White played an interesting exchange of queens and kept the initiative by promoting to a knight giving check to the black king: 39. hxg7, Nxf4 40. gxf8N+ Rxf8 41. dxe6 Rxd2 42. Rxd2 Bxg2 43. e7 Re8 44. Nxg2 Ng6 45. Rd6.


3r1q2/1b1r1ppk/1p2p2P/2pP3n/PpP2Q2/1P2N2P/3R1PB1/3R2K1 w--3 39
The result was a position with two pawns up. Still this was not an easy win. The difficulty is in the not connected $f$ and $h$ pawn. If other pawns and the two knights disappear from the board that is considered a draw. Therefore white should (1) solve the position at the queen side and (2) not exchange the knight.

In position 3 Jonny showed the audience how to handle the position on the queen side. In that position played 54. Rxb2 Rxa4 55. Re2 Nd7 56. Re7 Nxc5 57. Rxf7+. Now Jonny has reached the preferred position which is a win for white provided that the knighs remain on the board. In the next 14 moves Jonny showed its superiority and won the game according to strategic guidelines mentioned above. By this win Jonny became co-leader in the tournament.


8/5p1k/8/1RP1n3/P4N2/7P/1p3PK1/r7 w--2 54
Standing 1-2. Jonny, Komodo 4.5 (out of 8) 2-3 Shredder, Chiron 3.5.
Round 9
Chiron - Komodo $1 / 2-1 / 2$
Shredder - Jonny $1 / 2-1 / 2$
Chiron - Komodo started as a quiet Caro-Kann opening. After the players had left their book white was searching for an initiative to be taken. In the diagram position it played 16. Ne4, starting an indirect exchange of pawns and hoping to have an initiative thereafter. This turned out to be not without risk, since black started a dangerous advance of the h-pawn. By this advancement the white protection of the king was heavely hurt. The white queen was called to support the defence and was even forced to reside on h1 (see diagram 2). Although black was regrouping all its forces for a vigorous attack to the white king, Chiron used its invaded pawn and rook to balance the chances. For human chess players there was an unclear situation on the board. For computers almost clear. It was a draw, a clear draw by perpetual check. See diagram 3.


3rrnk1/1pq3pp/p1pbpp2/P7/3P4/1QP3N1/1P3PPP/R1B1R1K1 w--0 16


7r/3r1kp1/p1pqpp2/P7/1R1P3n/2P2Q1P/1P3P2/2BR2K1 w--1 31


7r/1R6/p1p2pk1/P3Pqp1/4QP1n/2Pr3P/1P6/2B1R1K1 w--5 37
After 11 moves Shredder and Jonny were out of book. They had played an accepted Semi-Slav of the Queens opening. In the position of diagram 1 black decided to exchange the b-pawn for the white d-pawn, by 14. ... b4 15. Bxb4 Qb6 16. Ba3 Qxd4.

r2qk2r/1b1n1pb1/p1pBp2p/1p4p1/P1pPP3/2N5/1P2BPPP/R2Q1RK1 b kq-0 14

Thereafter play continued in a fast and correct way. This means regular exchanges and no upsets at either side. So we arrived at the position of diagram 2 where white temporarily gained a pawn by 31 . Bxc5.


2kr4/1b6/p1r1pp1p/P1p3p1/1nP5/5P2/5BPP/1R2RBK1 w--0 31
The black position was dynamic and able to develop many threats towards the white king. For the computers the combinations were easy to unravel but human chess players needed many eyes to see all intricacies of the position. After a number of exchanges the position of diagram 3 appeared. For white everything was under control by the move 53. Rd6. Thereafter draw was unavoidable.


3k4/3b1R2/B6R/2P3p1/5P2/8/3r1r2/7K w--4 53
The result of this round was two draws leading to the following final standings: 1-2 Jonny, Komodo 5 (out of 9), 3-4 Chiron, Shredder 4 (out of 9 ). We see that of the 18 games played in the tournament only two resulted in a decision. The final standings led to two play-off matches, one for the first place and one for the third place.

## The play-offs

For the title world champion a play-off between Komodo and Jonny was necessary. Both programs scored 5 out of 9 . The first play-off consists of two games of 45 minutes with 15 seconds increment from move 1 . In case of $1-1$ a second play-off would take place under the time regime 20 minutes with 10 seconds increment from move 1, in case of $1-1$ again a third play-off will take place under regime of 10 minutes with 10 seconds increment from move 1. For the third place also a play-off was necessary, namely between Shredder and Chiron. The games were played simultaneously so we call them play-off round 1 and play-off round 2 (for the first play-off), play-off round 3 and play-off round 4 (for the second play-off) and play-off round 5 and play-off round 6 (for the third play-off) that only concerned the title match. At the beginning of round 1 drawing of lots took place in order to determine the colour. At the beginning of round three drawing of lots took place again.

## Play-off Round 1

Komodo - Jonny $1 / 2-1 / 2$
Chiron - Shredder $1 / 2-1 / 2$

In the direct contest for the title Komodo chose the most quiet opening of the game: Guico Pianissimo. Pieces found the correct places, peace was reigning. Still both programs were alert and prepared to sacrifice a pawn for attacking chances. White had the strongest feeling to do so. It sacrificed a pawn and invaded the black position. However black was on the alert and invaded with his queen the white position. This maneuver was sufficient for perpetual check. After 51 moves the draw was agreed.

The battle for the third place started with a Sicilian opening. Both sides maneuvered their pieces to their favoured places. Then black took up the idea to open the g -file for an attack on the white king. Therefore he played 18. ... gxf5. It was followeb by 19. Qxf5 Bc8 20. Qf2 Rg8 21. Bf3 Rg6 22. h3 Reg8 23. Rd2 Rg3.


In summary black increased his pressure on the white kingside and the spectators were eagerly waiting for the final blow. At first sight black believed that 27. ... Bxh3 was the beginning of the blow. The tension arose and complications could be only correctly evaluated by the two computer programs.


6rk/1q2bp1p/3p1n2/pN2p3/1p2P3/P4Brb/1PPRQ1P1/5RBK w--0 28
During the sequence of hits by the black sledgehammer white produced a fine counterattack by playing 32 . Bxe5+. For human beings a surprise, the more so since 32. ... f6 was answered by 33. Rxf6. The continuation was as follows: 33. ... Rg1+ 34. Kh2 R4g2 35. Qxg2 Rxg2 36. Rxg2 dxe5 37. Ra6 with a threat 38. Ra8. Black defended accurately by invading the queen in the white fortress meanwhile preventing mate by interrupting the check line with the bishop. Thereafter black found a saving by perpetual check.


7k/3qbp1p/3p4/pN2B3/1p2P1r1/P7/1PPRQ1r1/5R1K b-- 032
Standings:
For the title World Champion Jonny, Komodo $1 / 2$ out of 1 .
For the third place Shredder, Chiron $1 / 2$ out of 1 .

## Play-off Round 2

Jonny - Komodo $1 / 2-1 / 2$
Shredder - Chiron $1 / 2-1 / 2$
Jonny - Komodo was an accepted Queen Gambit. The game followed the opening book lines and in the middle game it handled the required strategical lines consequently. Both sides played very well and it seemed that there was almost nothing to report. However on move 31 white played R1xc3 in the diagram below. The pointe was not deep but surprising for the spectators since after 31 . ... bxc3 32. Ne7+ Qxe7 33. Rxd5 the black e-pawn was pinned. Yet it was not sufficient for a win since black could easily equal the position by 34 .... fxg5 35. hxg5 Rf5 36. Rxc2 Qxg5+. After six more moves the draw was agreed.


5rk1/5q1p/2N1ppp1/p1Rr2P1/1p1P3P/1Pn1Q3/P4P2/2R3K1 w--6 31
Shredder was facing the Anti-Meraner of the Semi-Slav variation. Stefan's program followed the favourite way of play as was performed by Botvinnik. So he sacrificed a piece for pressure and two pawns. Botvinnik loved to play this position with white as well as with black. The reason is the interestingness of the position. In this game both opponents were well prepared. They knew the tricks and hidden intricasies very well. On move 22 black reimbursed the exchange for a pawn and pressure. 22. ... Rxe4 23. fxe4 Qxe4 24. Qc3 Ne5 25. Kg1 Ng4 26. Ba7 c5.


2k2b1r/p2n1p2/b1p1pP2/P2q3P/2prN3/1p2BP2/1P3KP1/R1Q2B1R b-- 022
Play continued in a sharp way but still within the range of equality. At move 34 white solved part of his difficulties by playing 34 . Rxc4 Be3+ (a well thought check) 35. Kh2 Bd4. Play was resumed and after a new sacrifice of the exchange white did not have any danger anymore, and black did not have any chances anymore. So, draw was agreed.


8/1k3p2/bB2p2b/P1p4n/2p5/1p3P2/1P6/2R2BK1 w--2 34
Standings:
For the title World Champion Jonny, Komodo 1 out of 2.
For the third place Shredder, Chiron 1 out of 2.

## Play-off Round 3

After two rounds of play-off two more rounds turned out to be needed. As was agreed these rounds were played with the time control of 20 minutes and 10 seconds. Moreover before the start of this round colours were handled by tossing pawns. For the precise pairing see below.

Jonny - Komodo $1 / 2-1 / 2$
Chiron - Shredder 0-1
Jonny - Komodo started as a accepted Queen Gambit following the Mannheim variation. Jonny was aiming a dynamic position and tried to reach it by changing the material balance. It exchanged two of its pieces for a rook and two pawns. See diagram 1. By 15. Nxf7 Jonny surprised the opponent. The next move were more or less force: 15. ... Rxf7 16. Bxe6 Qf8 17. Rd1 Re8 18. d5 Kh8.

r1q2rk1/1b1n1ppp/p2bpn2/2p1N1B1/Q1BP4/2N5/PP3PPP/2R1R1K1 w-- 0 15

In the battle that followed black had some initiative which was transformed into a king attack, see diagram 2 . White had an ingenious maneuver to stop the attack by playing 23. Qf3. It was followed by 23. ... Bxf4 24. Qxg4 h6 25. Qe6. After the queen exchange the endgame of two pieces against the rook and an extra pawn was a clear draw which was agreed after some moves.


7k/1b1n1qpp/p7/2pPb3/4QBn1/2N5/PP3PPP/4R1K1 w--4 23
The game Chiron - Shredder had a positional Sicilian start. Both players occupied the best squares for their pieces. It was a real fight good squares and in retrospect we can remark that the decisive exchange was on move 36 , see diagram 1 when black exchanged its black bishop for the white knight on f5. The
remaining black knight was able to outperform the white bishop albeit on the long run.


4rk2/3b1p2/1p1p2qp/p1nP1Np1/P1P3P1/1P3R1P/3Q2BK/8b--4 36
The game continued with weakening the white queenside pawns and finally capturing them at the right time by a fine interplay between knight and queen. See diagram 2.


8/5pk1/1P1p3p/3Pn1p1/2P3P1/5R1P/1qr5/5BQK w--1752
After the rooks were exchanged and black was proud to be one pawn up the technical phase had to be precisely executed. This was in good hands of Shredder. From diagram 3 you see how it accurately performed its task. After gaining the pawn d 5 white resigned.


6k1/5p2/3p3p/3Pn1p1/3Q2P1/7P/6BK/1q6 b--19 69
Standings:
For the title World Champion Jonny, Komodo $11 / 2$ out of 3.
For the third place Shredder 2 out of 3 , Chiron 1 out of 3 .

## Play-off Round 4

Komodo - Jonny $1 / 2-1 / 2$
Shredder - Chiron $1 / 2-1 / 2$

Komodo and Jonny played the Italian opening which is a popular start in this tournament. The game went the usual way and was not really spectacular. At a viewpoint white as well as black tried to take the initiative in developing and executing a plan but the opponent always understood was threatening and took adequate actions. Hence the game ended in a draw which implied that the second play-off resulted also in a tie and a third play-off was necessary.

Chiron was facing the task of beating Shredder in this game. If not then Shredder would be third. However Chiron never came in a position with real winning chances. This implies that Shredder easily went into a drawn position and reached that draw also, securing the third place in the WCCC 2017.

Standings:
For the title World Champion Jonny, Komodo 2 out of 4.
For the third place Shredder $21 / 2$ out of 4 , Chiron $1 \frac{1}{2}$ out of 4 .
Shredder achieved third place in the WCCC 2017.

## Play-off Round 5

Jonny - Komodo $1 / 2-1 / 2$

In the game Jonny - Komodo the audience saw a accepted queens gambit with safe play from both sides. The sequence of exchanges led to an endgame with opposite bishops and a closed pawn structure. No wonder that the game ended quickly in a draw.

Standings:
For the title World Champion Jonny, Komodo $21 / 2$ out of 5 .

## Play-off Round 6

Komodo - Jonny 1-0
Jonny played the opening rather passively and gave Komodo all opportunity to place its pieces into strong positions for an attack against the black king. In the position which was already troublesome it could not find an adequate way to defend itself against the fate which was in the air above his head and therefore the very weak move 28. ... a5. See the diagram. Thereafter the position was no longer playable. With some straightforward punches Komodo put an end to the hope which Jonny may have had at the beginning of the game. As it went the computer chess world welcomes Komodo as the world champion for 2017, who defended its 2016 title with success. Congratulations.


3r1rk1/b2qn1p1/p4p2/1ppppP2/6Q1/2PP1R2/PP1B1PP1/3BR1K1 b--7 28
Standings:
For the title World Champion 1. Komodo $31 / 2$ out of 62 . Jonny $21 / 2$ out of 6 .

