
PENNSYLVANIA CHESS CHAMPIONSHIP REPORT

HITECH Wins Chess Tourney

Hans Berliner

In a tourney with 76 players including 15 masters, Hitech won the Pennsylvania State Chess Championship. It scored 4.5 points out of 5, and ended in a four-way tie for first place. However, the tie-breaking system was decisively in favor of Hitech, since it had played the strongest opponents. Hitech's performance rating for the event was 2559, which is a very high Senior Master rating.

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Due to a specific interpretation of the rules that bar a computer from winning money at a chess tournament, Hitech was denied not only the money prize (which is appropriate), but also the State Title and trophy. The rules only specify that the title go to the most highly placed state resident (can't a machine be a resident?) In any case, the title was awarded to Mark Eidemiller of Pittsburgh. Vivek Rao had a score of 2.5—1.5 after 4 rounds, and withdrew.

The game below was Hitech's best of the tourney, and represents a high-water mark for Hitech in beating a player rated over 2400.

Pennsylvania State Championship
State College, 30 August 87

White : Allan Savage (2412)

Black : HITECH

1.	e4	e5	7.	c3	Bd6
2.	Nf3	Nc6	8.	d.e5	f:e5
3.	Bb5	a6	9.	Qb3	B :f3
4.	B.c6	d:c6	10.	g:f3	Ne7
5.	O-O	f6	11.	Be3	Qd7?!
6.	d4	Bg4	12.	Q:b7	O-O
			13.	Qb3+	Kh8
			14.	Nd2 (A)	R:f3!
			15.	Kh1! (B)	Rff8
			16.	Rg1	Ng6
			17.	Qc4	Nf4
			18.	Rg3	a5
			19.	b3 (C)	Be7
			20.	Rag1	Nh3! (D)
			21.	R:h3	Q:h3
			22.	Q:c6	Rad8! (E)
			23.	Rg3	Qd7
			24.	Q.d7	R:d7
			25.	Nc4 (F)	Rd3!
			26.	N:e5	R:c3
			27.	Bd4	Rc2! (G)
			28.	Nd7	Rf7
			29.	Ne5	Rf4
			30.	Nd3	R:e4
			31.	B:g7+	Kg8
			32.	Bc3+	Kf8
			33.	B:a5	Ba3! (H)
			34.	b4	Re7!
			35.	Rf3+	Kg7
			36.	Nc5	R:a2
			37.	Na6	Ree2! (I)
			38.	N:c7	R:f2
			39.	Ne6+	Kg6
			40.	R:f2	R.f2
			41.	Kg1	Rb2
			42.	Nf4+	Kf5
			43.	Nd3	Rd2
			44.	Nf2! (J)	Kf4
			45.	Kg2	Rb2
			46.	Bc7+	Kf5
			47.	Bd6	B.b4 (K)
			48.	Bg3	Bc5
			49.	Kf3	Rb3+
			50.	Kg2	Bd4
			51.	Bd6	Be5
			52.	Bc5	Rb2
			53.	Be3	h5

54. Bc5 Kf4
 55. Ba7 Rd2! (M)
 56. Bb6 Bd4
 57. B:d4(N) R:d4
 58. Nh1 Rd2+
 59. Nf2 resigns (O)

(A) It is all from Encyclopedia of Chess Openings up to here, which appraises the position as "a definite advantage for White". However, Hitech has seen one move further!

(B) If 15. N:f3,Qg4+, 16. Kh1,Q:f3+, 17. Kg1,Qg4+; 18. Kh1,Q:c4+; 19. Kg1,Nf5 is to Black's advantage.

(C) This seems a pointless move. Black is not threatening anything on the Q-side. Better is 19 Rag1.

(D) A very interesting move that is difficult to meet. After 21. R1g2,g6!; 22. f3 (to meet the threat of Bh4), it is still anybody's game. Instead, White gives up the exchange for a pawn, to reach a position where Black has no more attack and has enough weak pawns to as make winning extremely difficult. To me, it is amazing that Hitech is able to manage the technique to win this very difficult-to-win position.

(E) Very precise. If now 23. Q:c7,R:d2!; 24. B:d2,R:f2; 25. Qb8+,Bf8 wins.

(F) White's position is very solid, and he is threatening Black's weak pawns. Given that he already has a pawn for the exchange, it seems that Black winning is almost to be ruled out. However, Hitech finds the weak spots in White's position.

(G) With weak pawns everywhere, it is important to utilize the dynamic possibilities in the position. For this purpose, keeping the rooks on the board is a good idea.

(H) White's attack has led to the temporary win of another pawn, and the reducing of Black's pawns to 2. However, now the Black pieces take charge. The text move fixed the a-pawn in place, and prepares to defend the c-pawn before wiping up the White Queen-side.

(I) Hitech knows about the absolute 7th rank! If now 38. Kg2,B:b4! wins. This maneuver was not possible with the rook on e7.

(J) The knight must come to the aid of the king, else Black gets a mating attack.

(K) Now Black's task has been simplified, although winning this position

was something that many masters in the tournament did not think was possible. White is well advised not to exchange bishops, as this makes the win much easier. However, Hitech maneuvers so as to force this exchange.

(L) It is also possible to win with 51.— B:f7; 52. K:f2,Kg4. However, the text is more thematic.

(M) Again threatening to exchange bishops with Bd4.

(N) On 57. Bc7+,Ke3; 58. Bg3,Bf6; 59. h4,Be7 White is in zugzwang and must move his king. There is a little trap worth playing for (especially against a computer). That is 60. Kh2! However, Hitech would just have continued Kf3, and not allowed the drawn ending that occurs after R:f2+??

(O) After 59.— Ra2, White is in zugzwang and must lose everything.

Postscript

Following its victory in the Pennsylvania State Championship, Hitech played one week later in the strong Ohio Chess Congress. There were 2 Grandmasters playing and many Senior Masters and Masters. Hitech's result of 4 -2 was achieved against very strong opposition. It played in a style that I find difficult to criticize and won the admiration of duffer and grandmaster alike. The good players, especially, could not believe a machine could be playing this well. Although Hitech won no prize, it gained another 20 rating points, making it 57 points gained in the last two events. This contrasts with a loss of 63 points in the three previous tournaments. We have made a number of adjustments to Hitech recently, and it now appears to have turned the corner, and is headed upward on a rather steep trajectory. Up to last week, Hitech had never beaten a player rated over 2325. Its recent successes, and the fact that the two games it lost were very much in contention until the very end, gives evidence that it is really playing much better than before.

AAAI
 gratefully thanks
Sun Microsystems
 for
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 to support
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 office computing environment.

**The new equipment will allow AAI to
 eventually increase its member services.**

Thanks again, Sun!