Philosophie der Berechenbarkeit – Themenliste

Seminar WS06/07

Prof. Dr. P. Schroeder-Heister, Thomas Piecha

1. Davis, M., *Why Gödel Didn't Have Church's Thesis*, Information and Control **54**, 3-24 (1982).

2. Sieg, W., *Step by recursive step: Church's analysis of effective calculability*, Bulletin of Symbolic Logic **3**, 154-180 (1997).

3. Odifreddi, P., *Church's Thesis*, Kapitel I.8 (S. 101-123) in: Odifreddi, P., *Classical Recursion Theory*, Studies in Logic and the Foundations of Mathematics **125**, North-Holland, Amsterdam (1999).

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5. Welch, P. D., *On the Possibility, or Otherwise, of Hypercomputation*, British Journal for the Philosophy of Science **55**, 739-746 (2004).
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7. Hamkins, J. D. und Lewis, A., *Infinite Time Turing Machines*, Journal of Symbolic Logic **65**, 567-604 (2000).

8. Deutsch, D., *Quantum theory, the Church–Turing principle and the universal quantum computer*, Proceedings of the Royal Society of London A **400**, 97-117 (1985).

9. Kieu, T., *Hypercomputation with quantum adiabatic processes*, Theoretical Computer Science **317**, 93-104 (2004).

10. Penrose, R., *Shadows of the Mind*, Vintage, London (1995).
    Feferman, S., *Penrose's Gödelian Argument*, Psyche **2**, http://psyche.cs.monash.edu.au/v2/psyche-2-07-feferman.html (1995).

11. Pour-El, M. B., *The Structure of Computability in Analysis and Physical Theory: An Extension of Church's Thesis*, in: Griffor, E. R. (Hrsg.), *Handbook of Computability Theory*. Studies in Logic and the Foundations of Mathematics **140**, S. 449-471, North-Holland, Amsterdam (1999).

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13. Siegelmann, H. T. und Sontag, E. D., *Analog computation via neural networks*, Theoretical Computer Science **131**, 331-360 (1994).

14. Davis, M., *The Myth of Hypercomputation*, in: Teuscher, C. (Hrsg.), *Alan Turing: Life and Legacy of a Great Thinker*, S. 195-211, Springer, Berlin (2003, 2. Aufl. 2005).

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