Dzhafarov, Damir D.; **Goh, Jun Le**; **Hirschfeldt, Denis R.**; **Patey, Ludovic**; **Pauly, Arno**
Ramsey's theorem and products in the Weihrauch degrees. (English) Zbl 07271557
Computability 9, No. 2, 85-110 (2020).

Summary: We study the positions in the Weihrauch lattice of parallel products of various combinatorial principles related to Ramsey's theorem. Among other results, we obtain an answer to a question of Brattka, by showing that Ramsey's theorem for pairs (RT^2_2) is Weihrauch-incomparable to the parallel product of the stable Ramsey's theorem for pairs and the cohesive principle ($\mathsf{SRT}^2_2 \times \mathsf{COH}$).

MSC:

03D Computability and recursion theory

Keywords:

computable combinatorics; Ramsey theory; computability theory; reverse mathematics

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