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Mario Kart is hard. (English) [Zbl 1425.68131]


Summary: Nintendo’s Mario Kart is perhaps the most popular racing video game franchise. Players race alone or against opponents to finish in the fastest time possible. Players can also use items to attack and defend from other racers. We prove two hardness results for generalized Mario Kart: deciding whether a driver can finish a course alone in some given time is NP-hard, and deciding whether a player can beat an opponent in a race is PSPACE-hard.

For the entire collection see [Zbl 1351.68008].

MSC:
68Q17 Computational difficulty of problems (lower bounds, completeness, difficulty of approximation, etc.)
68T20 Problem solving in the context of artificial intelligence (heuristics, search strategies, etc.)

Full Text: DOI

References:

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