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## Games and loop integrals

*Tuesday, August 22, 2017 11:30 AM (30 minutes)*

Project HEPGame was created to apply methods from AI that have been successful for games, such as MCTS for Go, to solve problems in High Energy Physics. In this talk I will describe how MCTS helped us simplify large expressions. Additionally, I will describe how we managed to compute four loop (and some five loop) integrals in an automated way. I close with some interesting challenges for AI in theoretical high energy physics.

**Presenter:** RUIJL, Ben (Nikhef)

**Session Classification:** Plenary