



# Thesis Proposals at the Chair of Sports Analytics @Saarland University

Chair of Sports Analytics, Saarland University

April 28, 2026

## 1 Enhance Elo-Rating Systems using Serve and Return Rates and Betting Odds in Tennis

The Elo rating system is solely based on a player's win-loss distribution, without incorporating additional information present in other match-forecasting models. [1] suggest integrating additional variables, such as expected goals or betting odds, into the Elo rating updates to decrease informational loss. This approach could be transferred to tennis by including serve and return statistics from recent matches. Therefore, this thesis aims to transfer the findings of Wunderlich and Memmert [1] to tennis.

**Supervisor:** Luis Holzhauer & Abdelrahman Abdelsamad

**Scope:** Master Thesis

**ID:** Adjusted\_Elo\_Tennis

## References

- [1] Fabian Wunderlich and Daniel Memmert. "The Betting Odds Rating System: Using soccer forecasts to forecast soccer". en. In: *PLOS ONE* 13.6 (June 2018), e0198668. ISSN: 1932-6203. DOI: 10.1371/journal.pone.0198668. URL: <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0198668> (visited on 04/14/2026) (cit. on p. 1).