

Having a Ball: evaluating game excitement and scoring streaks using in-match trend estimation

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Abstract

Nu ved jeg godt nok intet om sport, men...

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1 Introduction

We introduce the Excitement Trend Index (ETI) as an objective measure of spectator excitement in a given match.

- Excitement defineret som skift af hvem, der er i føring
- Vurdering af om et hold trender lige pt.
- Identificere hvilket “hot periods” et hold har i løbet af en kamp til efterfølgende evaluering

Ref til trends

2 Methods

Let m index a given match between teams i and j and let $D_m(t_m) = S_i(t_m) - S_j(t_m)$ be the difference in scores where t_m are the ordered event times for a score by either team i and j .

We then impose the model

$$f_m(t) \sim \mathcal{GP}(\mu, C_\theta)$$
$$D_m(t_m) \mid f_m(t_m), t_m \stackrel{iid}{\sim} N(f_m(t_m), \sigma_m^2)$$

- Trenderen
- TDI
- ETI

3 Results

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4 Discussion

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Acknowledgements

Bibliography