Modeling Collective Anticipation and Response on Wikipedia

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We measure the attention to a pre-planned event through Wikipedia page view counts.

We develop a simple model for the dynamics of attention, and we fit the model to empirical data to explore two research questions.

RQ1. What are the essential characteristics of the temporal pattern towards planned events?

We observe exponential anticipation (before the event) and response (after the event), and circadian rhythms;
The time constants of anticipation and response are event-related;
Circadian rhythms are associated with the geographical distribution of attention.

RQ2. How is event-related information (e.g., category and outcome) associated with the temporal pattern?

We show that the event category and the anticipatory pattern before the peak help predict the response pattern.