A framework to monitor, model, and actively manage crowd behaviour

Motivation and Problem

- **Unforeseeable situations** and **crowd dynamics** during events (e.g. festivals, sport events or fairs) can result in dangerous situations (e.g. mass panic).
- Thus, it is important to not only **understand and model** the behaviour of crowds, but also **monitor** the real conditions within crowds during the event to be able to **intervene** in cases of (anticipated) emergency.
- Our overarching goal is to **mitigate risks for large crowds** by combining crowd monitoring, modelling and intervention in one joint **framework**.
- We have experience in the three separate pillars; in this poster session, we’re actively seeking your feedback on how to bring them together, e.g. interesting case studies, scenarios, monitoring sources and management strategies.

Framework Proposal

**Monitor**
- **Select monitoring indicators**
- Assess accuracy to intervene
- Implement possible interventions

**Model**
- **Calibrate & validate model**
- Select monitoring indicators

**Intervene**
- Evaluate success (modelling)
- Implement possible interventions

Any suggestions for case studies?

- Setting, data availability, other comments?

Thank you!