

# Tracking juggling balls using the Kinect

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1 A Juggling Robot

2 Hough Transform

3 Kalman Filter

4 Our plan

# Let's go

FIXME: Paper  
maybe abstract

FIXME

FIXME

# Hough Transform

FIXME: Thiemo

# Kalman Filter

sub

FIXME: Rolf

# Conclusion

Video + paper conclusion



IN:  $rgb + z$

- eliminate background in  $z$
- search local maxima in  $z \rightarrow$  ROIs
- use ROI mask on  $rgb$
- Hough transform on  $rgb$
- Match corresponding balls in multiple frames
- Kalman filter for each ball

# Challenges

- Local maxima
- Multiple balls (colour?)

# The end

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