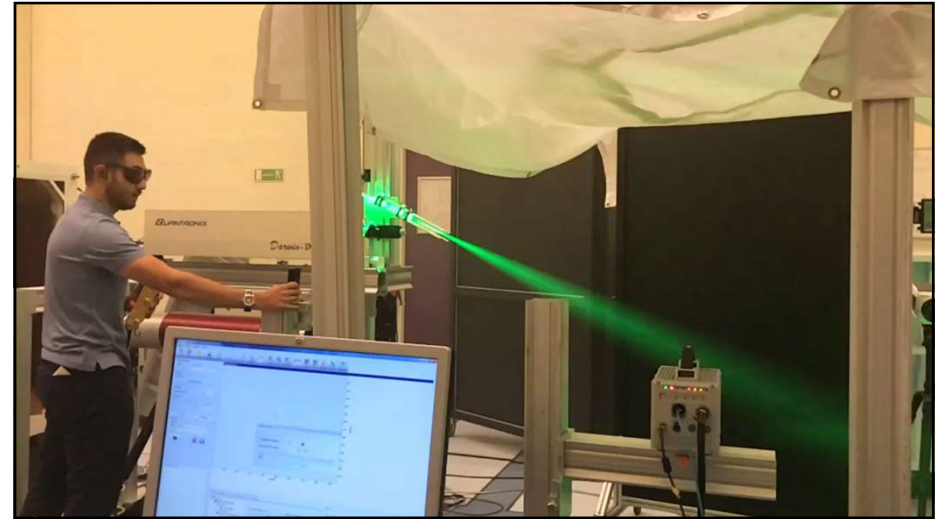


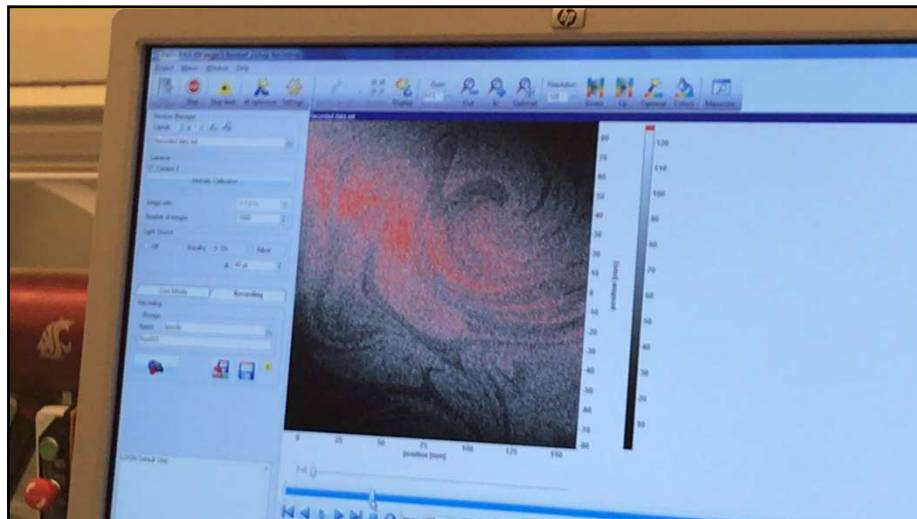
Importance aerodynamics of pitched baseballs

- Understand the behaviour and trajectory of (pitched) baseballs
- Goal: translate baseball terms like curve, break into quantifiable parameters by examining the wake
- Effects of spin parameter, surface roughness and seam orientation on wake baseball
- ('inverse') Wind tunnel testing

3



4



5

Summary

- 3 main effects on baseball: surface roughness, magnus effect, orientation.
- Spin rate > 0.2 , magnus effect dominates, ball curves like banana
- Spin rate < 0.1 , orientation effect dominates. Differing aerodynamic forces and more erratic movement.

Interested, comments or else:
Jorian.knepper@gmail.com

8