

JESSIE LIU '16

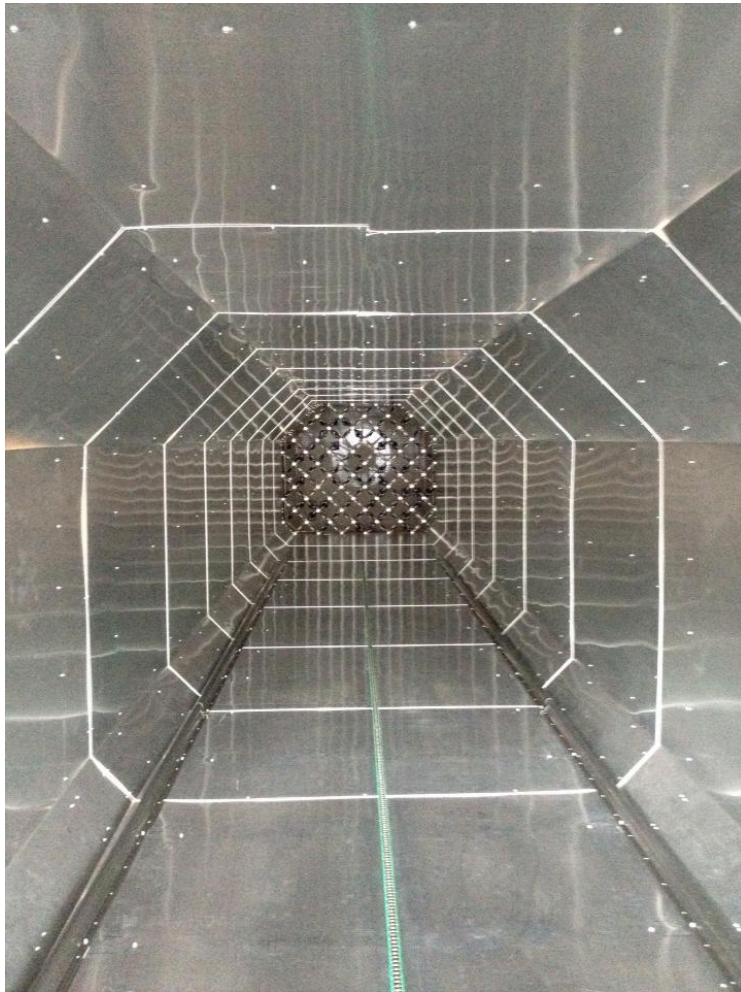
Max Planck Institute of Dynamics and Self-Organization – Goettingen, Germany

# Research at MPIDS

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- Project studying energy decay in turbulence
- Active grid with individually movable paddles
- Programmed different movements into the paddles
- Measured how these different movements affected the energy decay of turbulence in a wind tunnel

# Active grid and wind tunnel



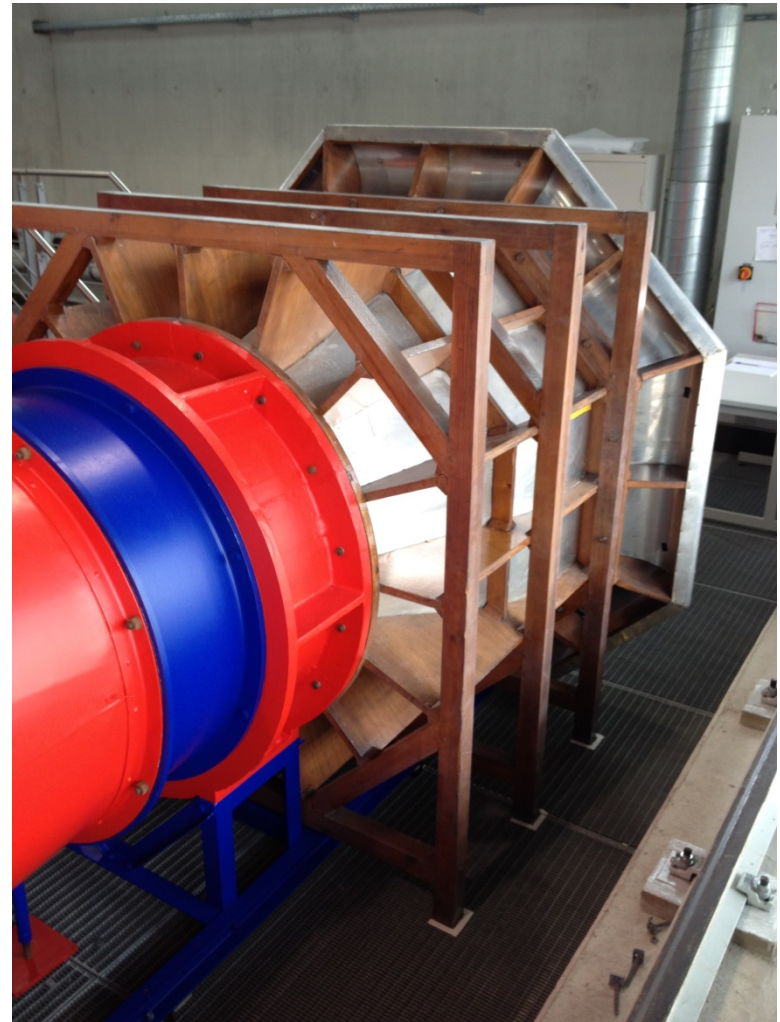
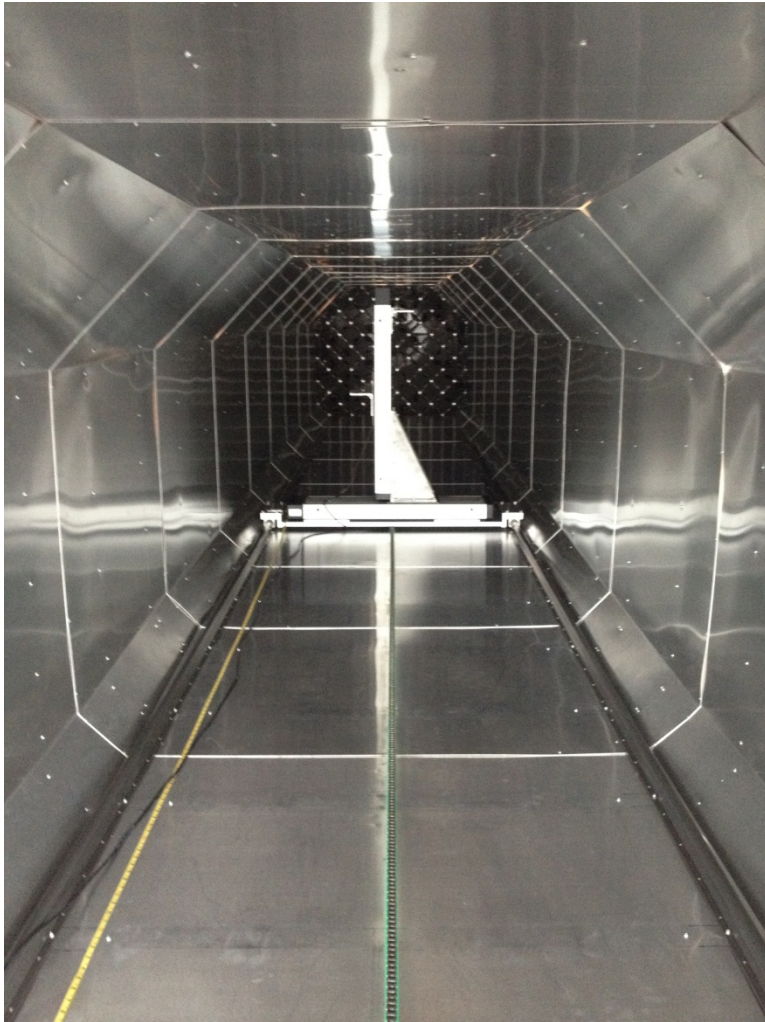
- Part of the tunnel is actually Ludwig Prandtl's original wind tunnel and is over 80 years old.

# Most rewarding part of work

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- Actual results!
- Found that coding the paddles in certain different ways had almost no effect on the energy decay
- However, one special way did produce a different energy decay than the others

# Another view of the tunnel



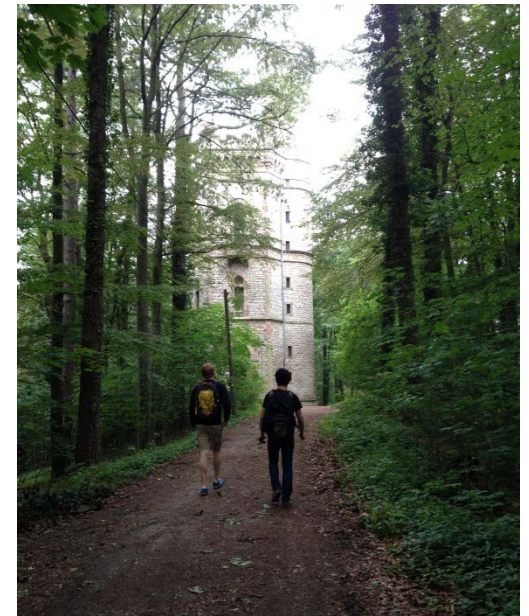
# Impact on the organization

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- Hope to write/publish a paper on findings soon
- Built up some code that can be used by future students
- Students in future can continue our research



# Goettingen, Germany



# Impact on my future

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- Before this summer, very unsure of graduate school/career in research
- Now strongly considering these two options, after talking with some of the graduate students at the institute
- Also, considering graduate school/working abroad in the future



# Travels



# Conclusion

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- ❑ Overall very rewarding experience
- ❑ First time traveling in Europe
- ❑ Learned to speak some German
- ❑ Met a lot of locals and students from other universities
- ❑ Learned to survive on my own
- ❑ Hope to go abroad again in the future!