



*MEC516/BME516:  
Fluid Mechanics I*

*Chapter 3: Control Volume Analysis*

*Demo: The Bernoulli Effect*

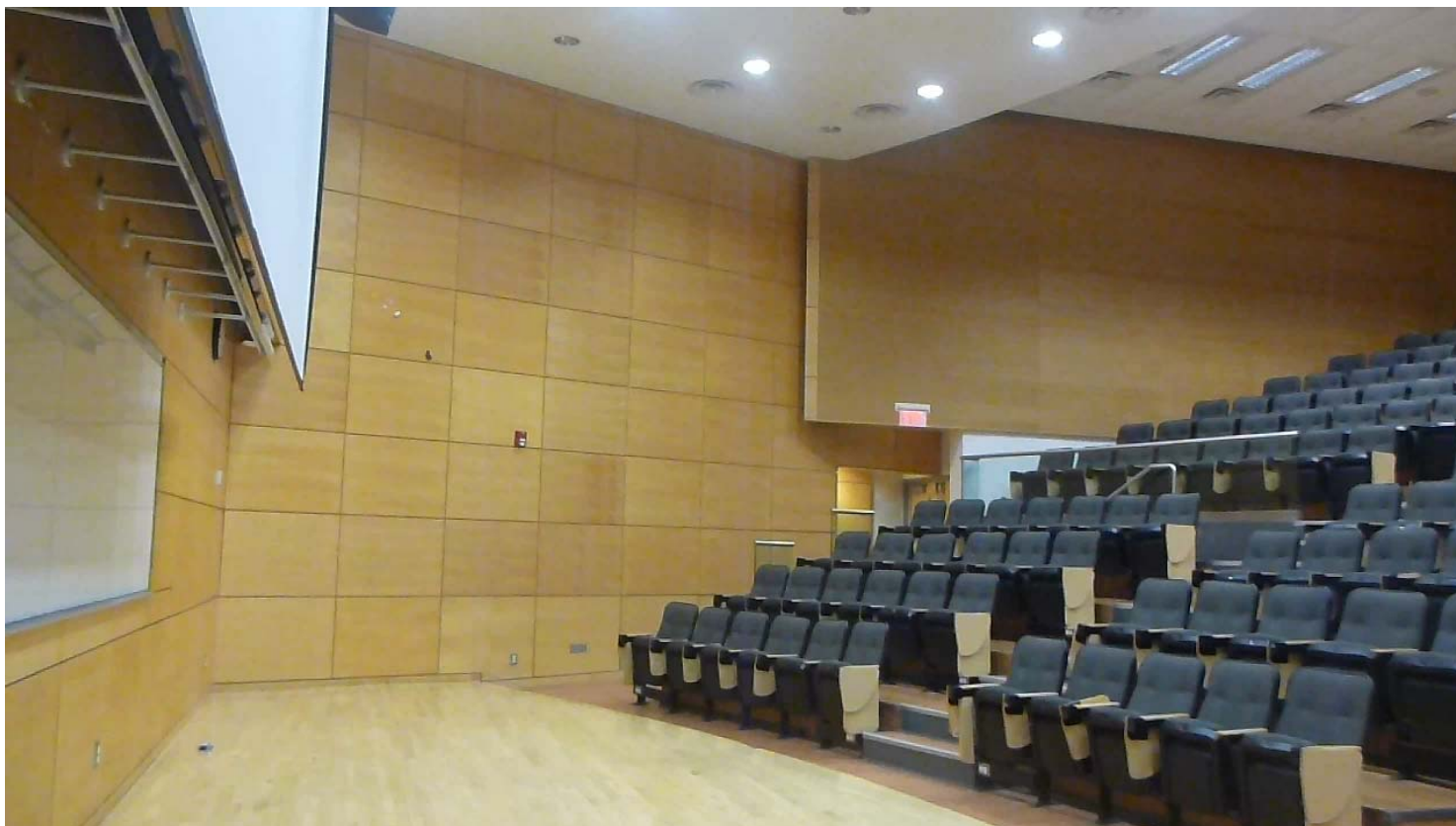
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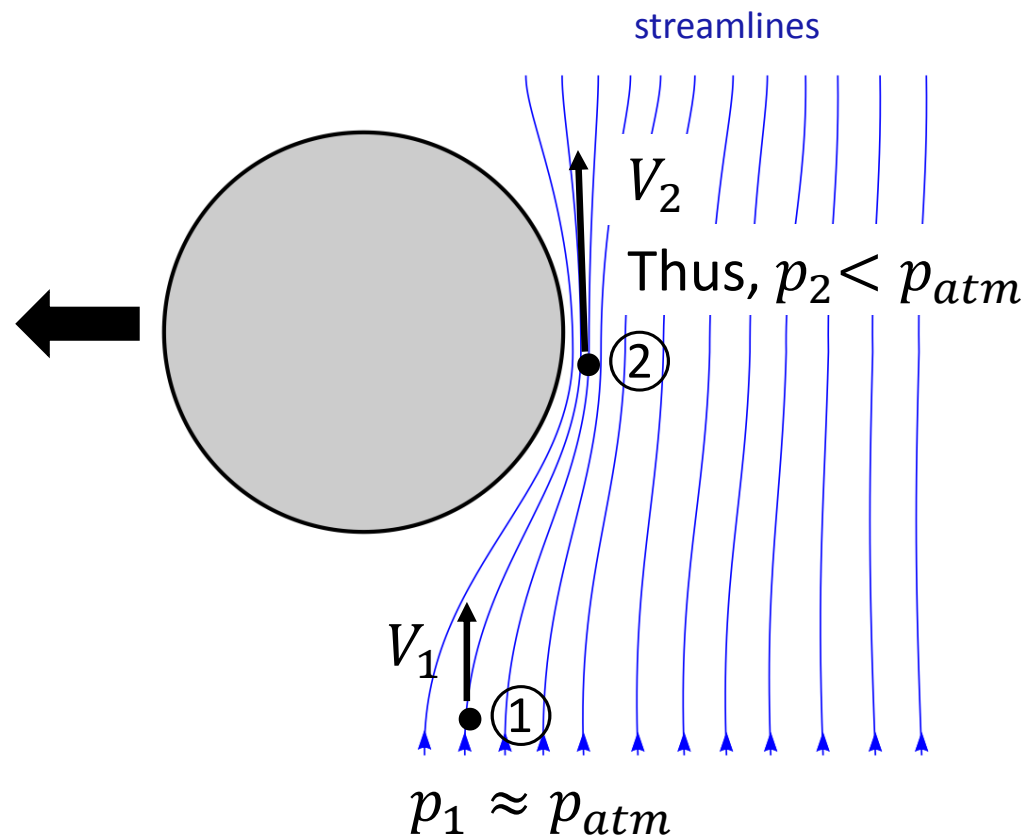
## Video Demo: Bernoulli Equation

Beach ball suspended in the air jet from an electric leaf blower



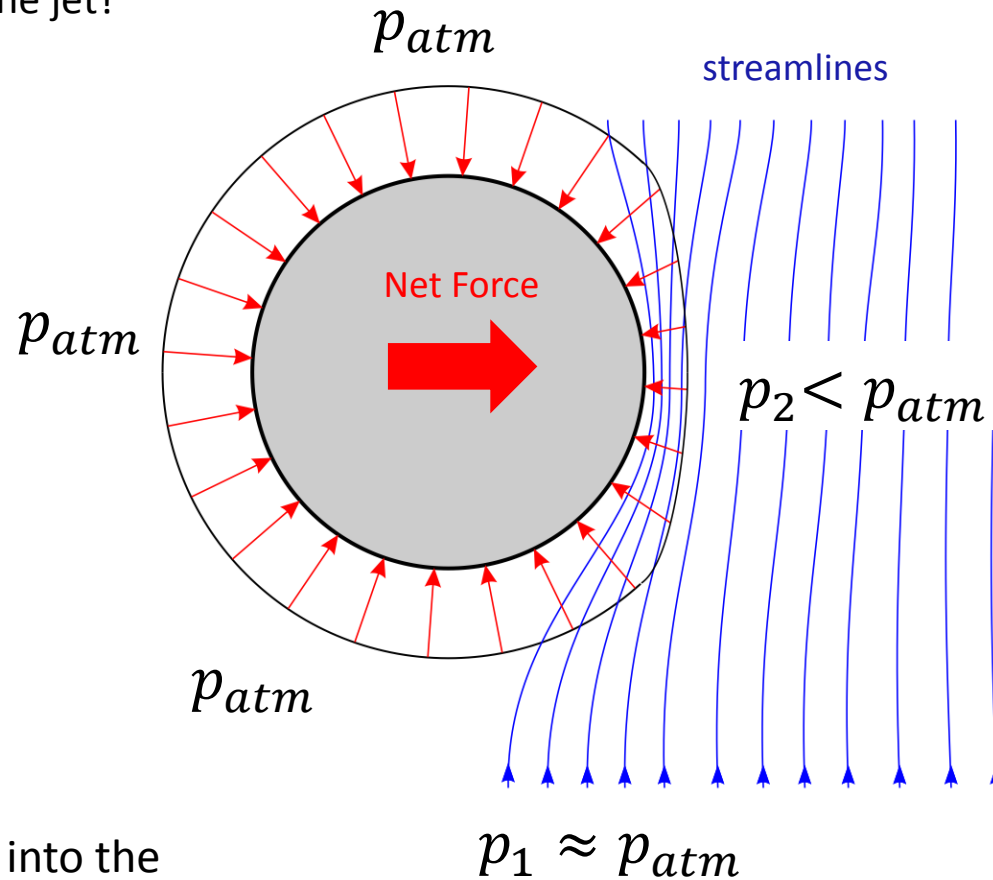
## Video Demo: Bernoulli Equation

Why does the ball stay in the jet?



## Video Demo: Bernoulli Equation

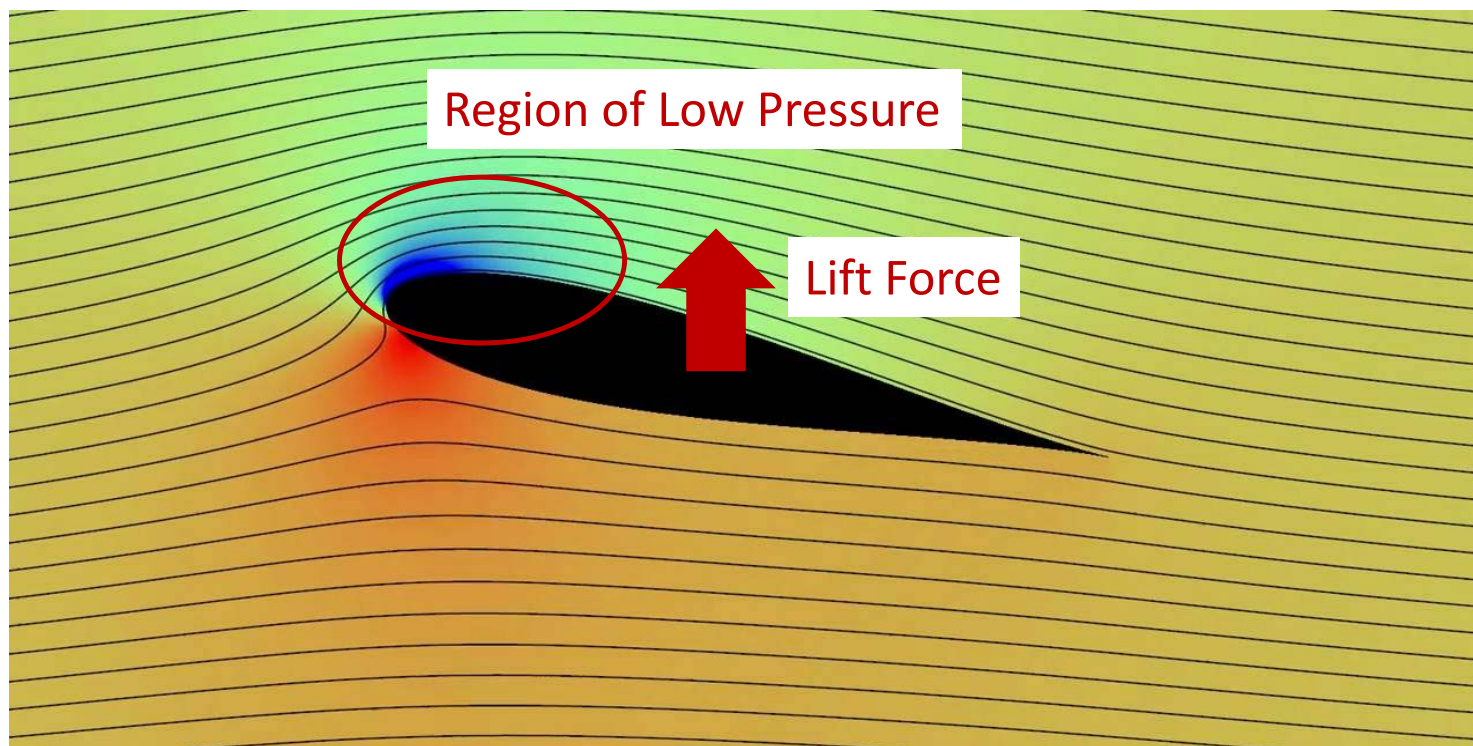
Why does the ball stay in the jet?



The ball is pushed back into the jet by the pressure force.

## Streamlines over an Airplane Wing

- Lift is generated by the Bernoulli effect.





Source: A Brief Introduction to Fluid Mechanics,  
Young, Muson and Okiishi (1997)

## END NOTES

Presentation prepared and delivered by Dr. David Naylor.

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