

# Experimentally Exploring the New Force Using Quantum Casimir Force

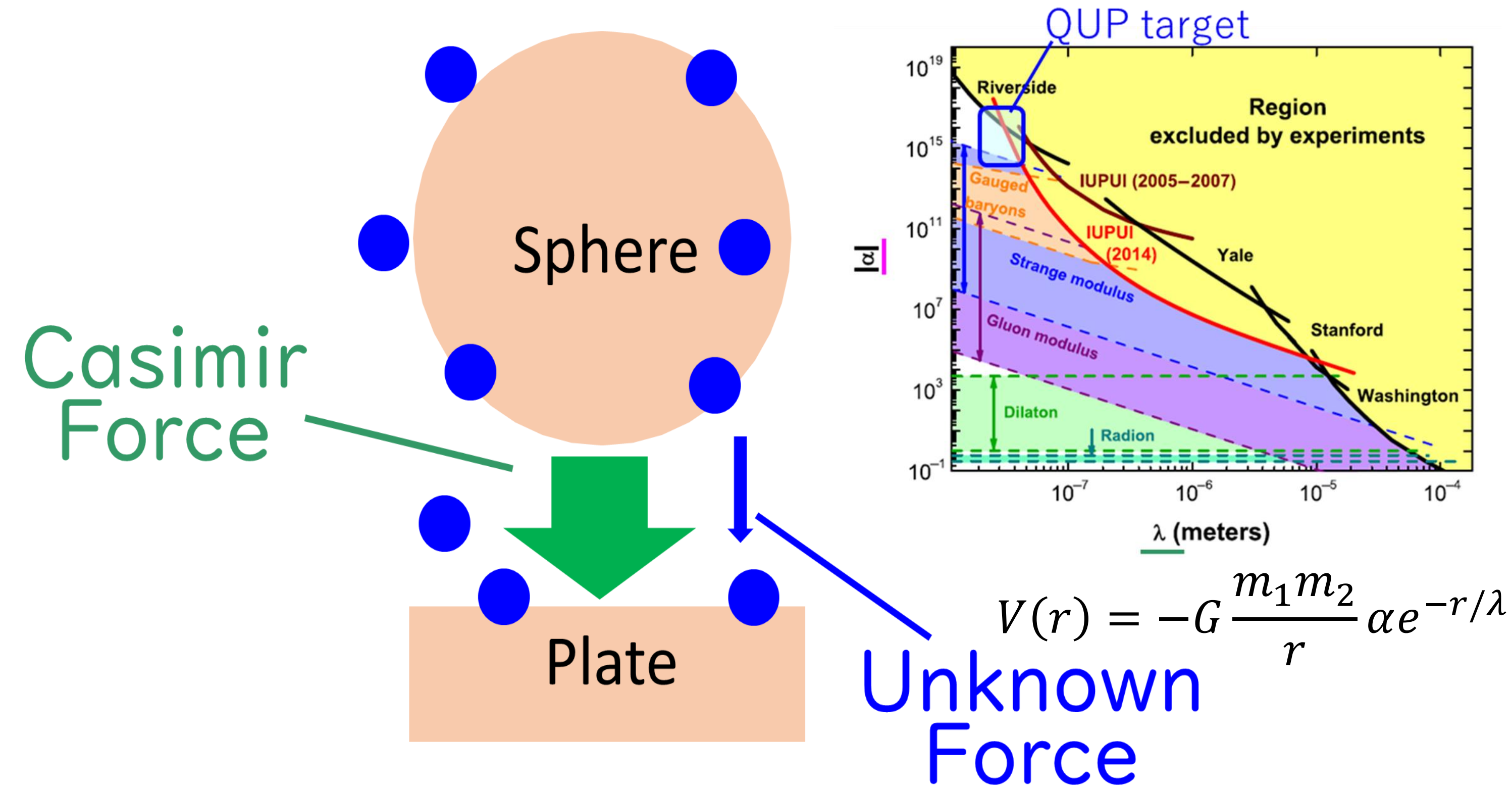
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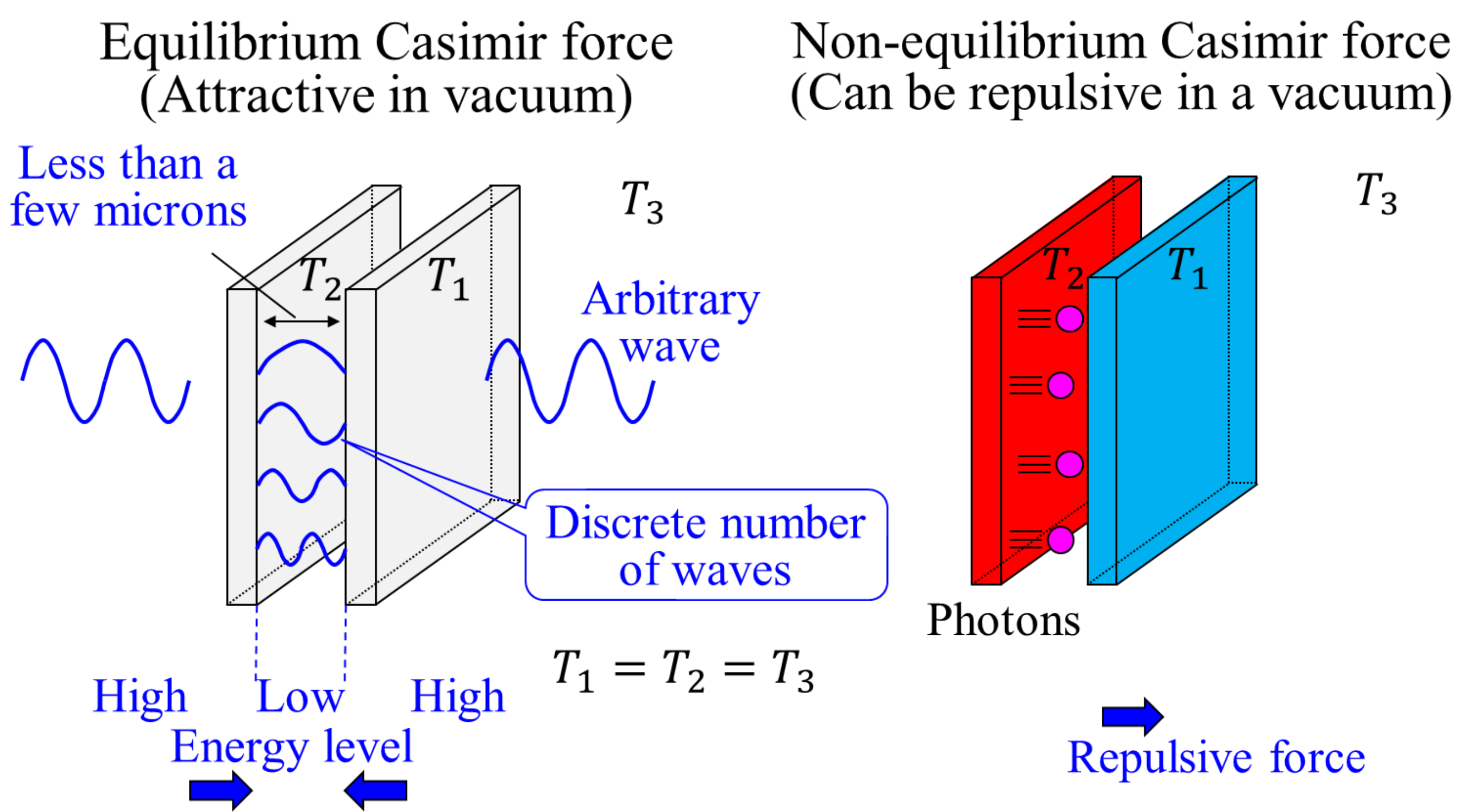
## Objective

- The Casimir Force experimental setup mainly aims to search unknown quantum fields and New Force Search
- May have sensitivity of the range 0.01-1eV

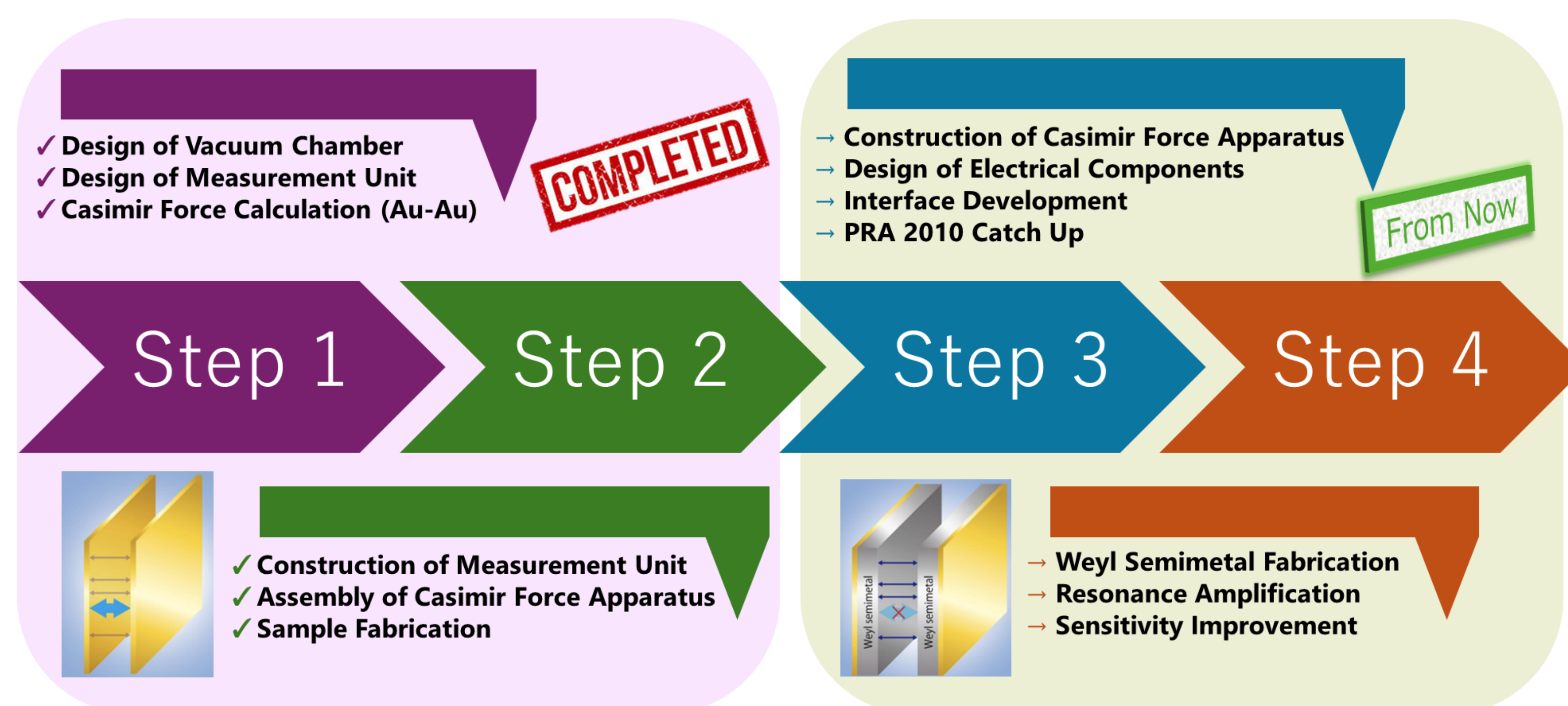


## Introduction

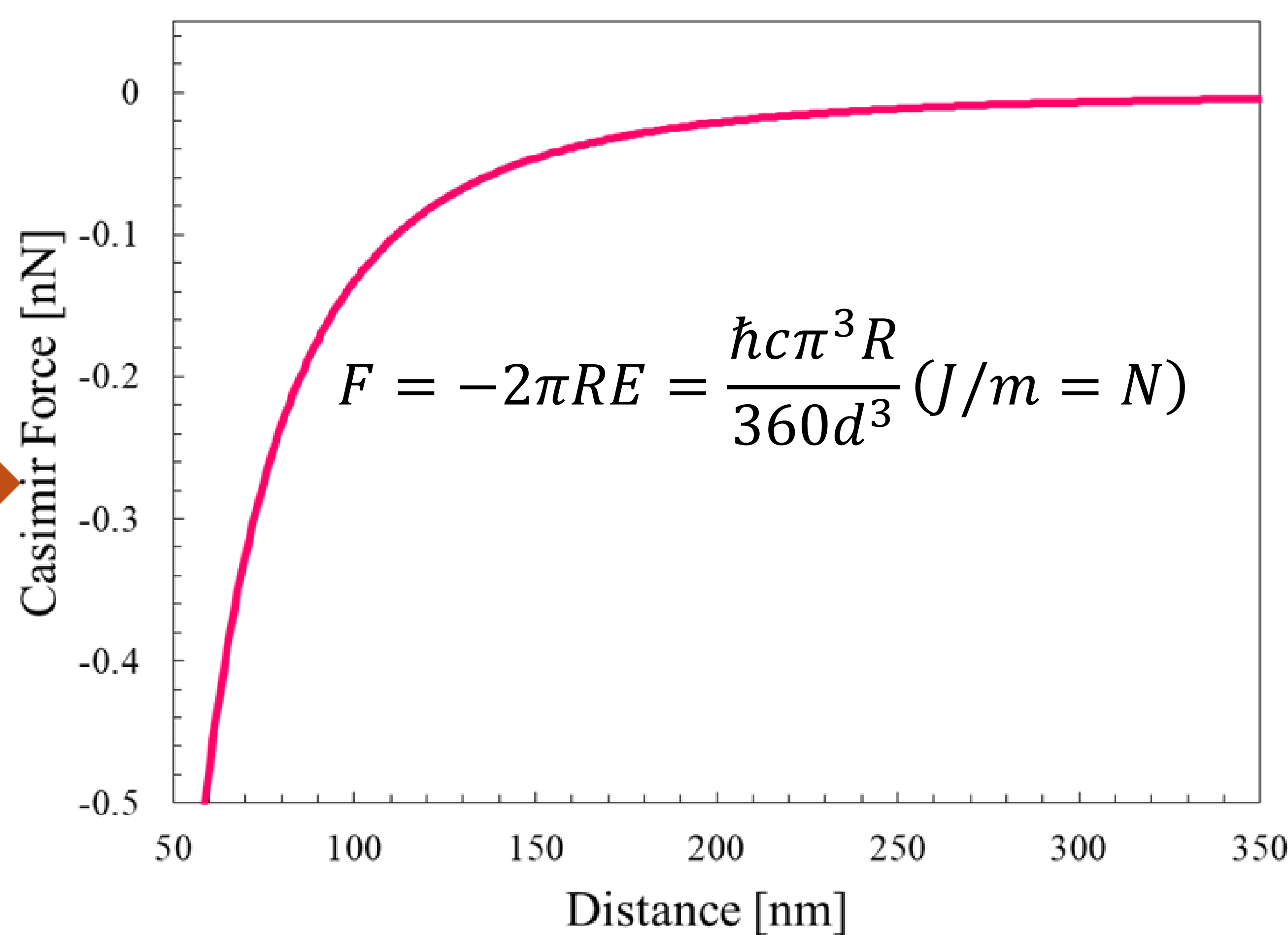
### Concepts of Casimir Force



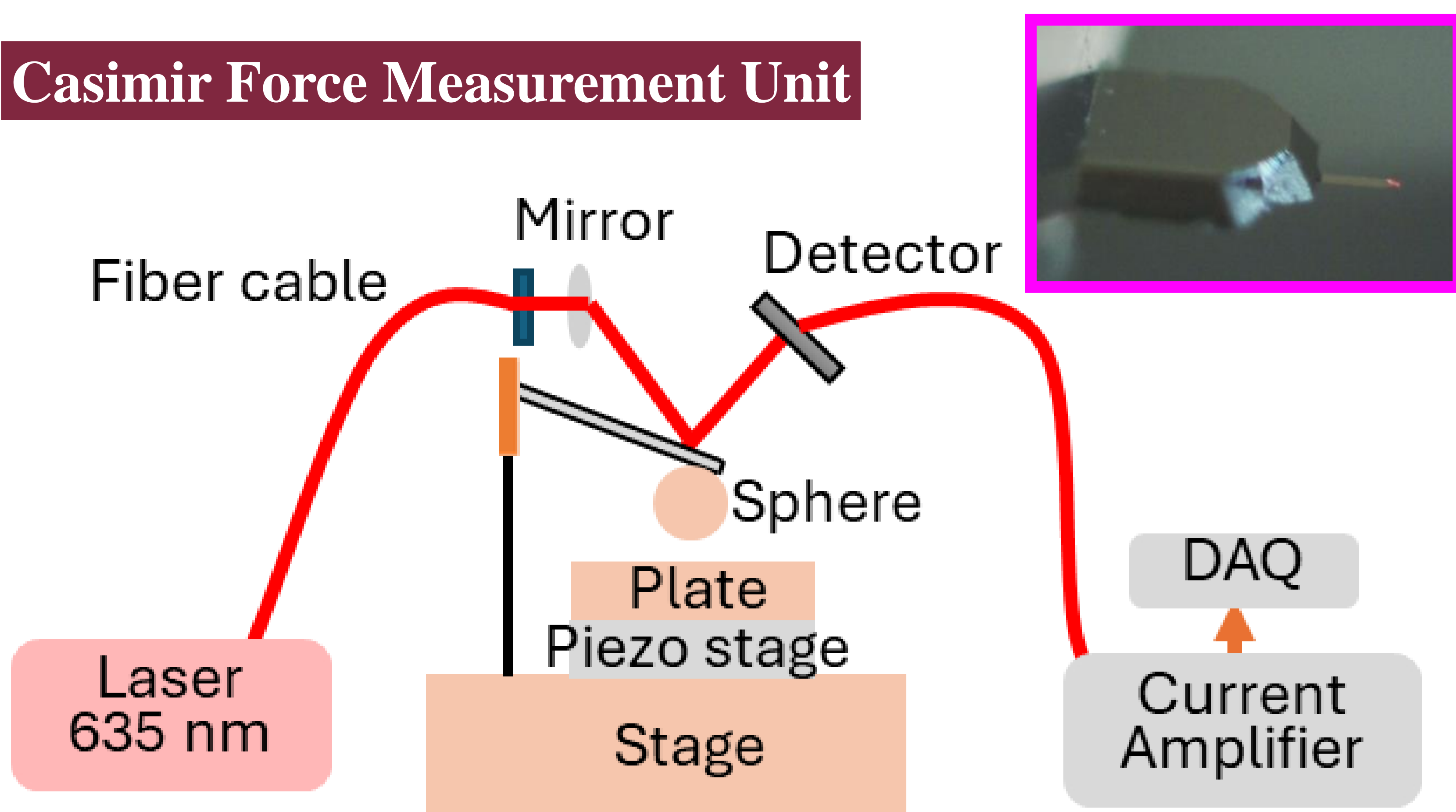
## Experimental Plan



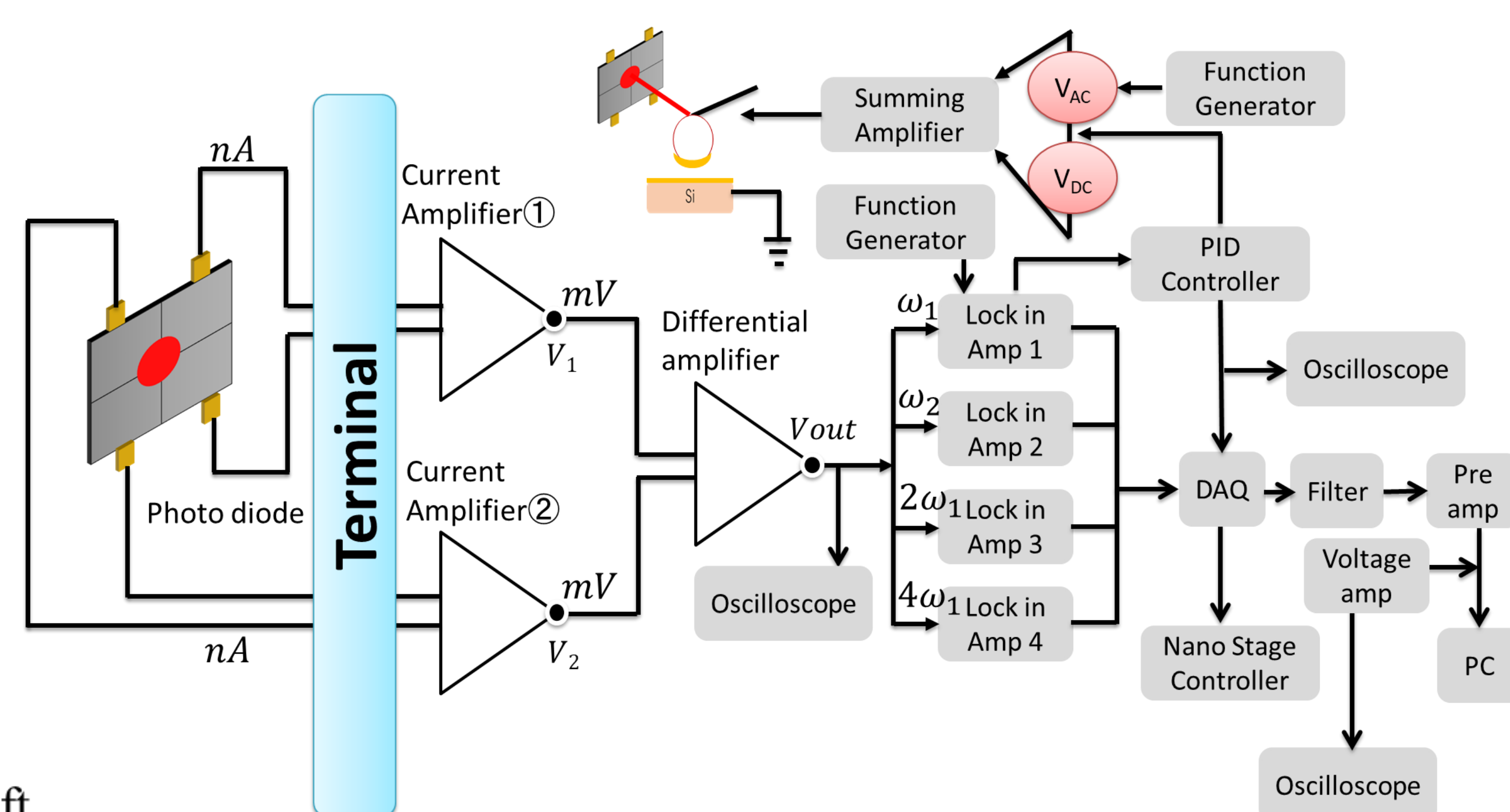
## Casimir Force Calculation



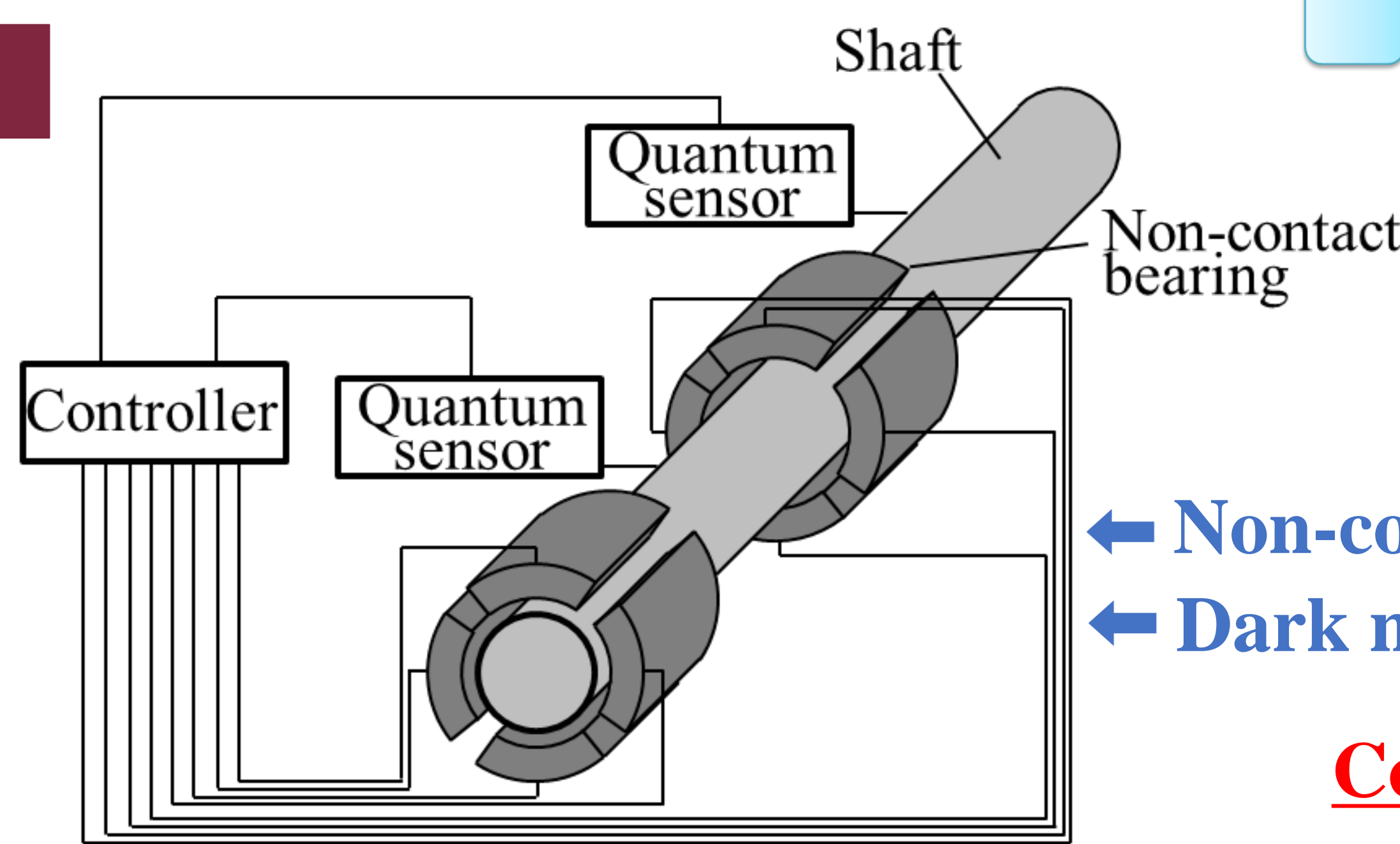
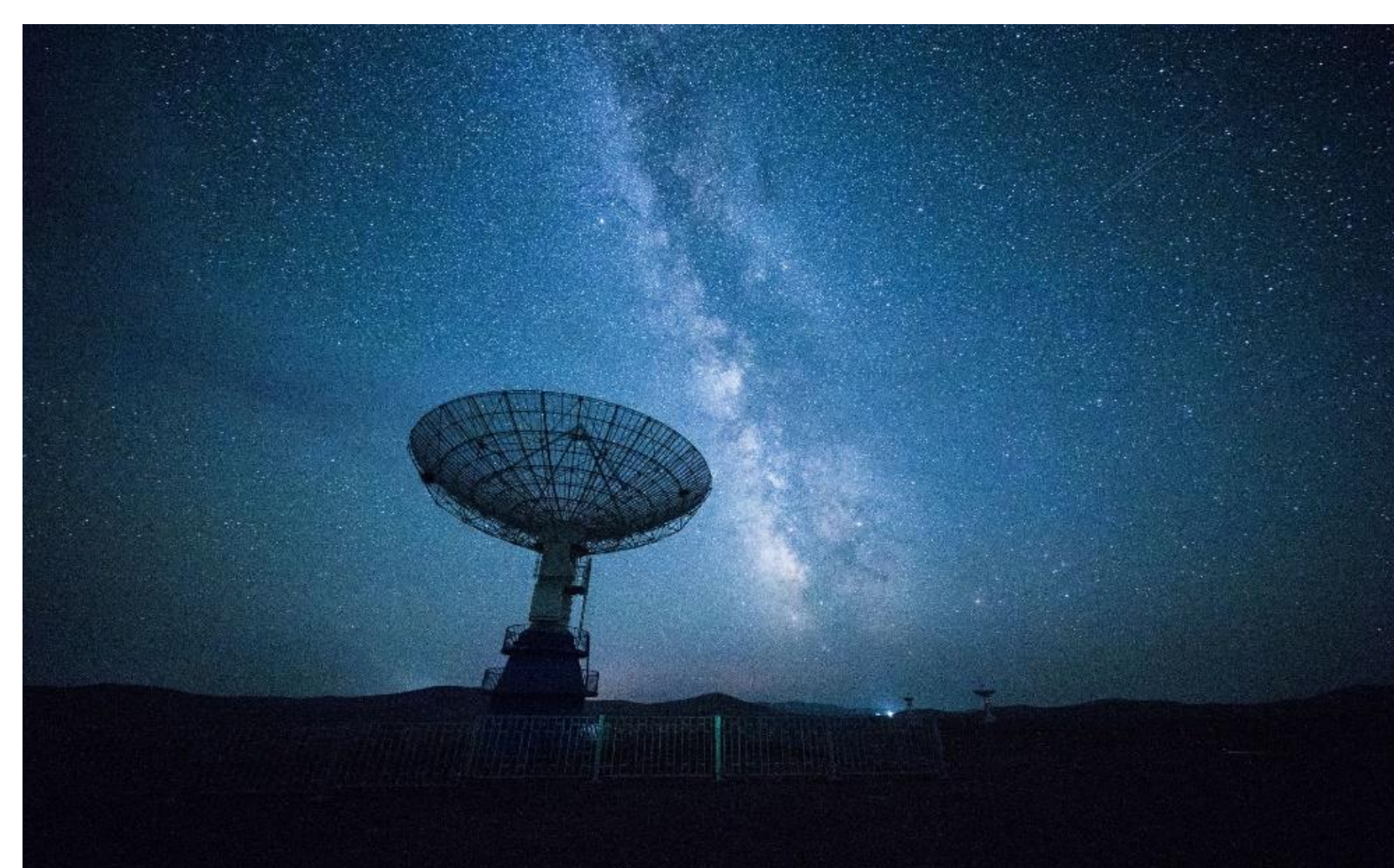
## Casimir Force Measurement Unit



## Calibration Technique



## Applications



## Conclusion

- Current Apparatus Sensitivity: 0.1nN
- Casimir Force Distance: 75 to 350 nm

- ← Non-contact shaft-bearing system
- ← Dark matter search / New force

Contact details

