

# Testing General Relativity with Gravitational Waves

## Testing General Relativity

- Consistency tests
  - Masses and spins
  - Number of polarizations
- Parameterized tests
  - Orbital evolution
  - Speed of gravity/mass of the graviton
- Number of spatial dimensions

## Astrophysical Calibration

- What if GR is perfect?
- Can we learn about our detectors' behavior?

## Suggested Reading

- Clifford Will. *Was Einstein Right? Putting General Relativity to the Test*. Basic Books (1993).
- <https://www.ligo.org/science/Publication-GW170817TGR/index.php>
- <https://www.ligo.org/science/Publication-O2TGR/index.php>