

# The $\tau$ vs $\pi$ argument is really long and interesting

It is mostly a notational argument

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## Why use $\tau$ when there is $\pi$

### Theorem

$\tau$  is great when dealing with circles

#### 1. Fourier transforms

$$\hat{f}(\zeta) = \int_{-\infty}^{+\infty} f(x) e^{-2\pi i x \zeta} dx \quad (1)$$

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1. Fourier transforms

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2. A simple pendulum

$$T \approx 2\pi \sqrt{\frac{L}{g}} \quad (2)$$

# An excuse to write equations

1. Highlight what  $\text{\LaTeX}$  is best at