

## Interlude

- 1) LTI systems are relatively simple mathematically and are extremely useful in practice (e.g., for modelling real-world systems).
- 2) LTI systems, while relatively simpler, involve convolution.
- 3) Are we doomed to directly face convolution in every problem we solve that involves LTI systems?
- 4) Often, there is a better way. Employ transform-based solution techniques that utilize mathematical tools such as:
  - CT Fourier series
  - CT Fourier transform
  - Laplace transform