SciPy

- SciPy is a collection of mathematical algorithms and convenience functions built on the NumPy extension of Python
- SciPy contains various tools and functions for solving common problems in scientific computing
- It adds significant power to the Python session by providing the user with high-level commands and classes for manipulating and visualizing data

SciPy

- Each group of functions are classified as sub-packages in SciPy
- https://docs.scipy.org/doc/scipy/reference/
  - Special mathematical functions (scipy.special) - airy, elliptic, bessel, etc.
  - Integration (scipy.integrate)
  - Optimization (scipy.optimize)
  - Interpolation (scipy.interpolate)
  - Linear Algebra (scipy.linalg)
  - Statistics (scipy.stats)

SciPy

- Other Modules:
  - Fourier Transforms (scipy.fftpack)
  - Signal Processing (scipy.signal)
  - Compressed Sparse Graph Routines (scipy.sparse.csgraph)
  - Spatial data structures and algorithms (scipy.spatial)
  - Multidimensional image processing (scipy.ndimage)
  - Data IO (scipy.io)
  - Weave (scipy.weave)