# Numpy!

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- Numpy Following mostly from the scipy lecture notes.
  - numpy, ndarray, (asarray(list), zeros, empty, ones, eye, full {like}), datatypes, shape, copy, reshaping, slicing, indexing, conversions between types, operations (+, -, &, —, broadcasting,
  - numpy functions: (where, all, any, unique, isnan, isinf, ¿, ¡, ==), (concatenate, setdifference, union, intersection), (axis {count_}nonzero, sum, max, min, average, prod, exp, abs, arange, round, log, sort, power (\*\*), sign, sort)
  - numpy.random, generating random numbers of the type and shape you want.
  - functions from numpy.random (permutation, shuffle, seed, choice)
  - numpy (linspace, histogram), plotting, matplotlib, pylab
  - numpy functions: correlate, convolve, mean, median, average, memmap