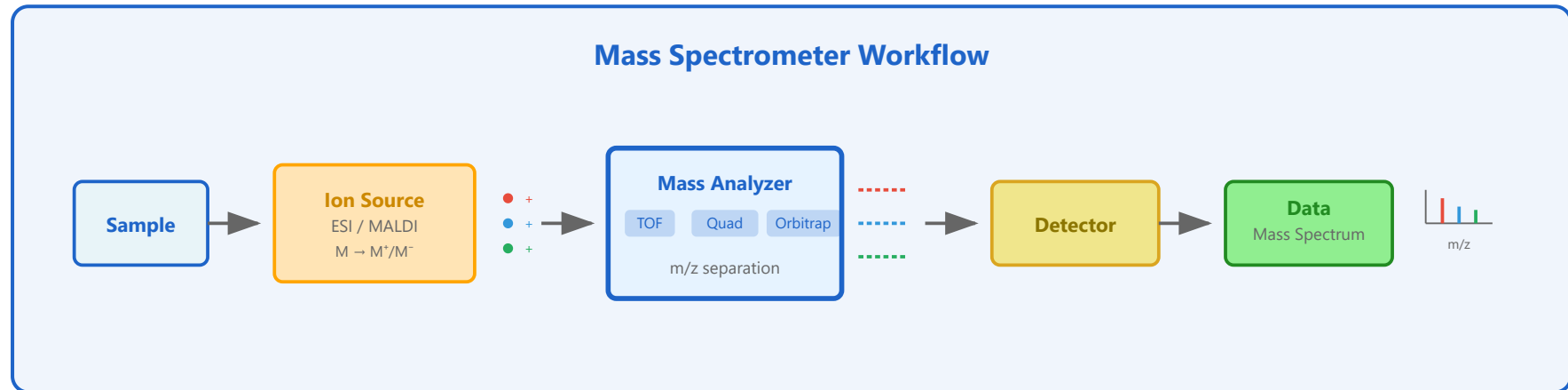


# Mass Spectrometry Basics



## Ionization Methods



## Mass Analyzers

**TOF:** Time-of-flight, fast  
**Quadrupole:** Selective, robust  
**Orbitrap:** High resolution  
**Ion Trap:** MS<sup>n</sup> capability

## Tandem MS (MS/MS)



Proteomics workflow essential.

## Resolution & Accuracy

**Resolution:** Distinguishes isotopes  
**Accuracy:** <5 ppm for Orbitrap  
**Dynamic range:** 10<sup>4</sup>-10<sup>6</sup>