

# Electronics for Calorimeter Readout

- Media: Silicon (e.g. CALICE, SiD Si-W Ecal), Scintillator (e.g. CALICE AHCAL), Crystals (BAF2), Gas (RPCs), Liquids (Xe,...)
- Readout: PMTs, SiPMs, APDs,
- Modes: Analog, digital, timing (LGAD, TDCs),...
- ASICs – KPiX, HGCROCN, SPIROC, SKIROC
- Dynamic range
- Rates
- Radiation tolerance
- Material profile
- Integration – sensor + readout, monolithics, vertical integration, interconnects, compact designs
- Power – supplies, converters, power pulsing, cooling
- Cost: development, production