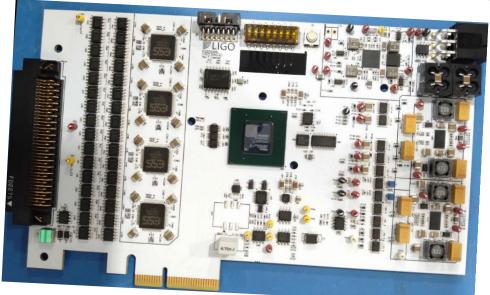# Converter Refresh for Future LIGO Upgrades

Daniel Sigg & Marc Pirello

DAC: 50nV/√Hz @ 100Hz / ADC: 200nV/√Hz (prelim.)

No Rogue Lines/Oscillators

DAC: 6 Months Running at H1

ADC ±20V

DAC ±10V

32-Channels / Differential / $\Sigma\Delta$-Technology w/ IIR Filters

Faster Sampling Rates / AA/AI Filters in FPGA

Timing System Integration / Time Stamped Data