



FCFD - AC-LGAD Strip Readout

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Status and Next plans

- Received the chips from TSMC, testing has just started: to first order things look right
 - When injected external pulse by using a pulse generator all channels are functioning
 - Can see the discriminators firing and by varying the pulse magnitude and can see analog outputs working over their whole range
 - Over a large range of pulse magnitudes, don't see the discriminator firing time change much, which means the CFD seems to be working properly.
- Next steps:
 - Detailed characterization of the chip on the bench, will move to the readout board after initial tests are OK; measurements with IR laser and beta-source to follow
 - Currently working with ASIC designers on detailed specifications of the v2 chip, readout data format, bandwidth, power, etc....

