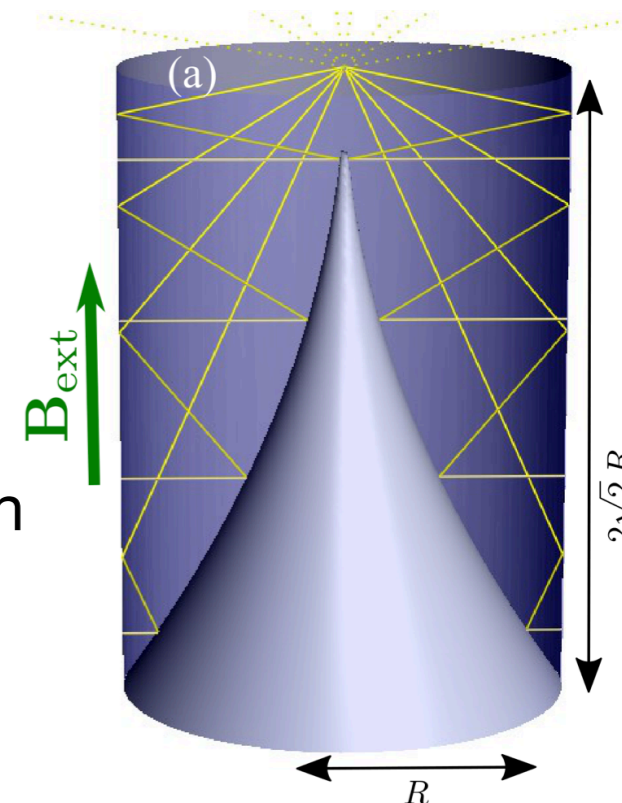
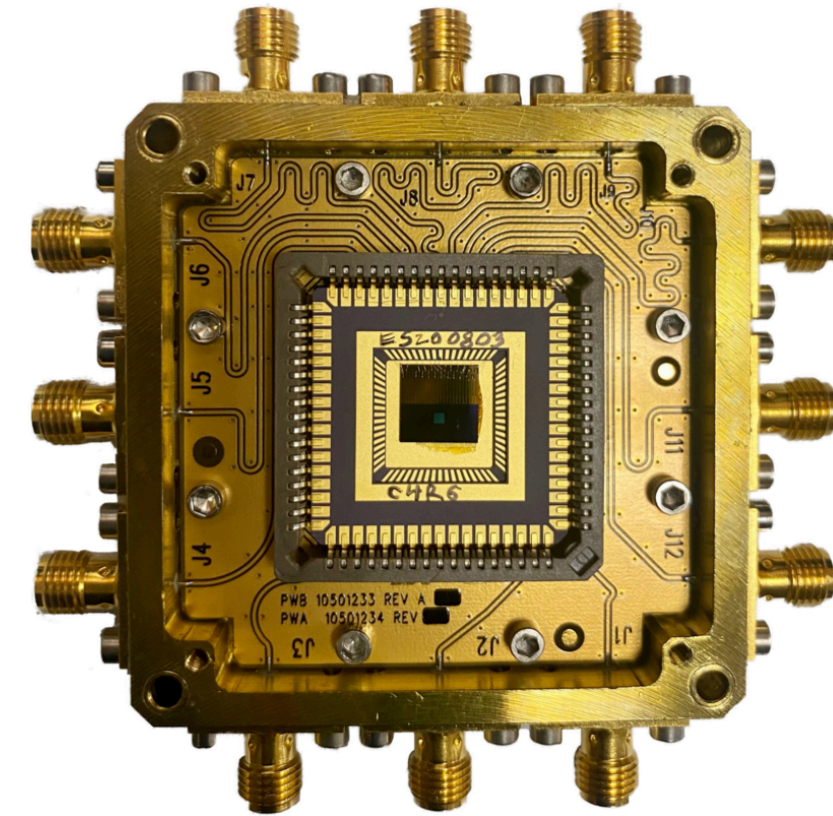
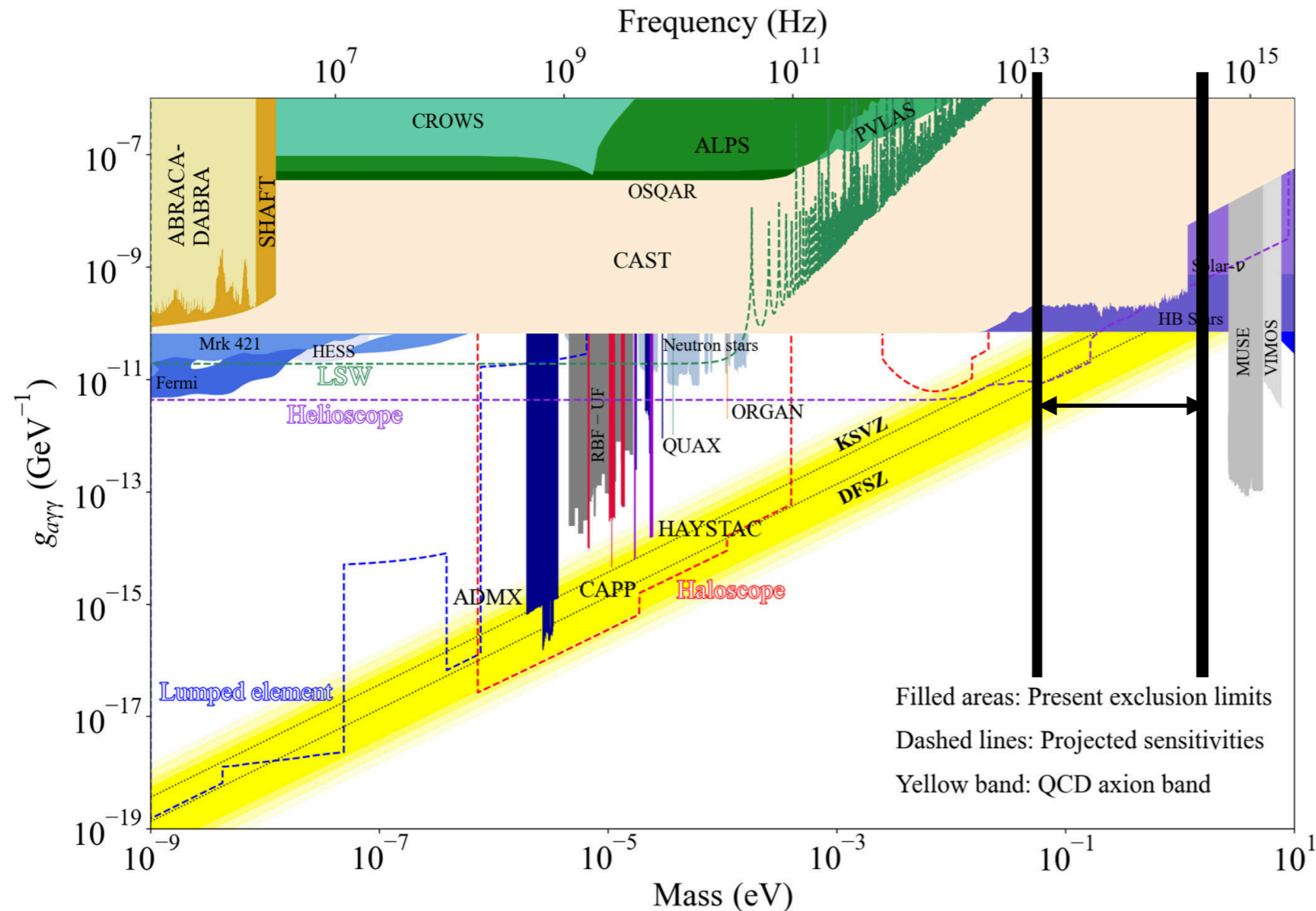


Axions with low-threshold SNSPD

SNSPD overview:
see M. Shaw's slides

Low-threshold photon detectors will play a key role in
broadband axion detection



SNSPD demonstrated nanowire sensitivity to 0.04 - 1 eV → mass reach

Best DCR < 1e-5 c.p.s → axions coupling sensitivity

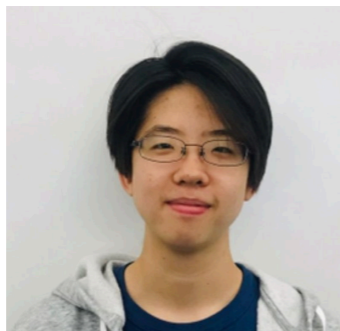
Final SNSPD to realize axion detection require challenging R&D

Axions with low-threshold SNSPD

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COLLABORATION



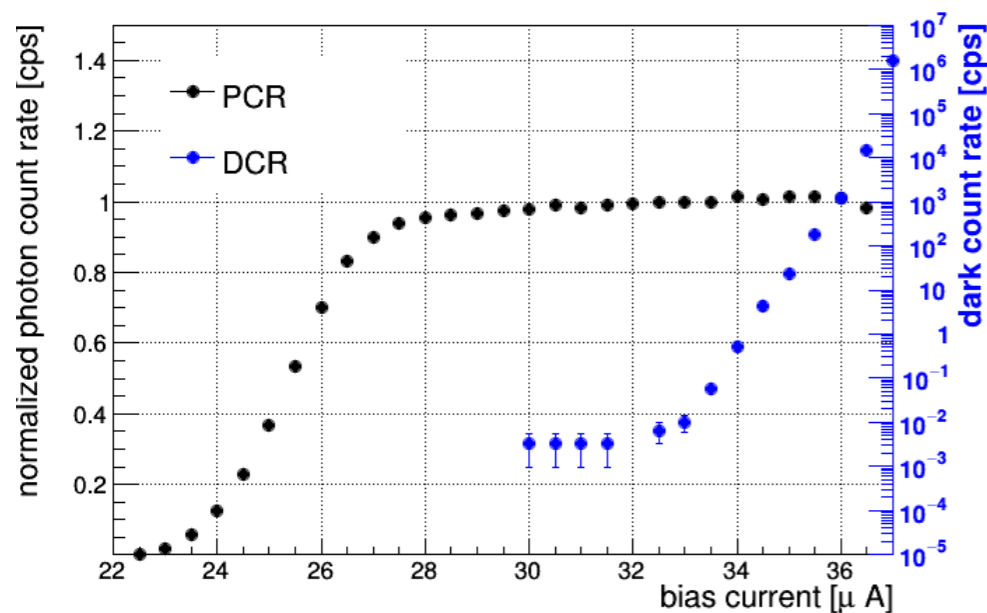
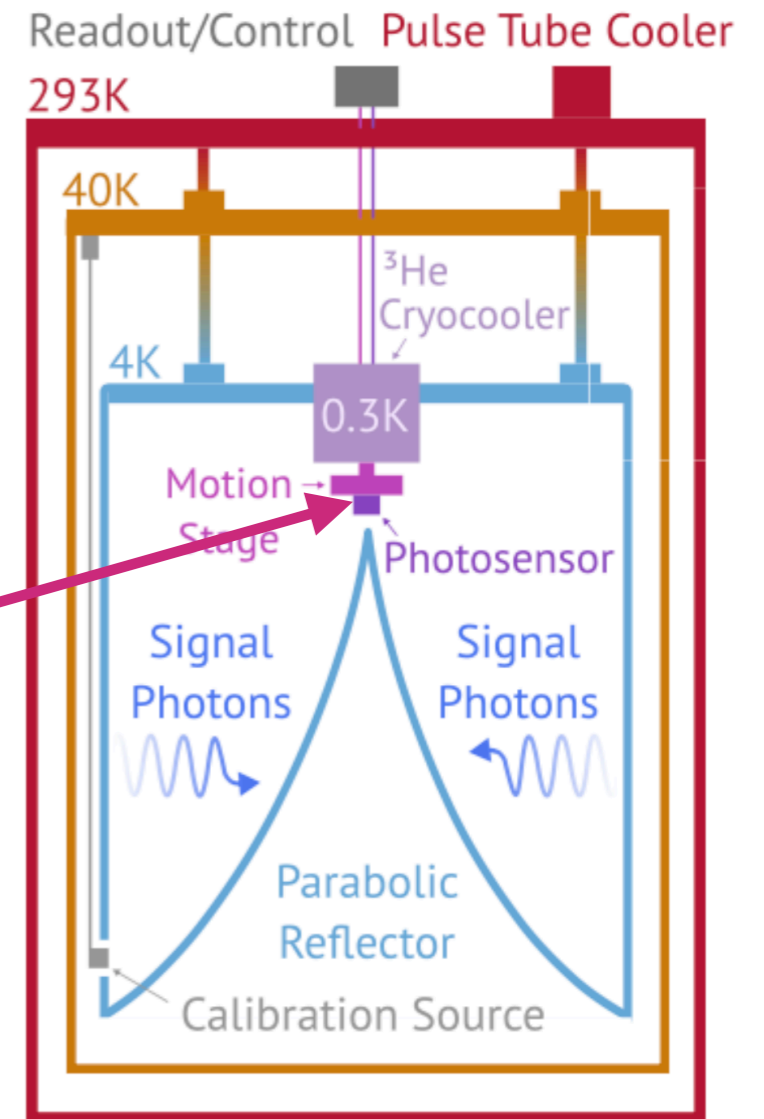
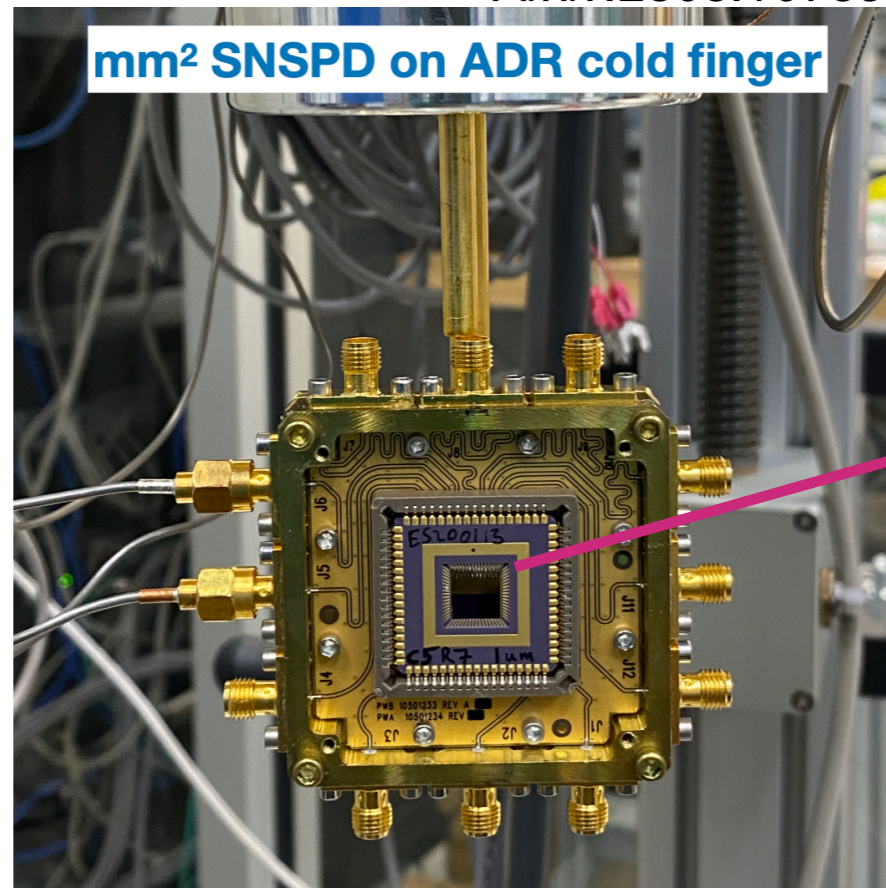
Jamie Luskin



Christina Wang

ongoing R&D to meet
sensor parameters

Arxiv:2303.10739



Towards new
axion sensitivity



SNSPD area/channel
scaling: see S. Xie's slides

