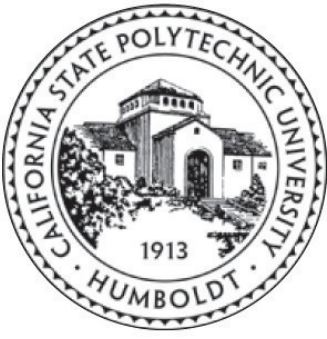




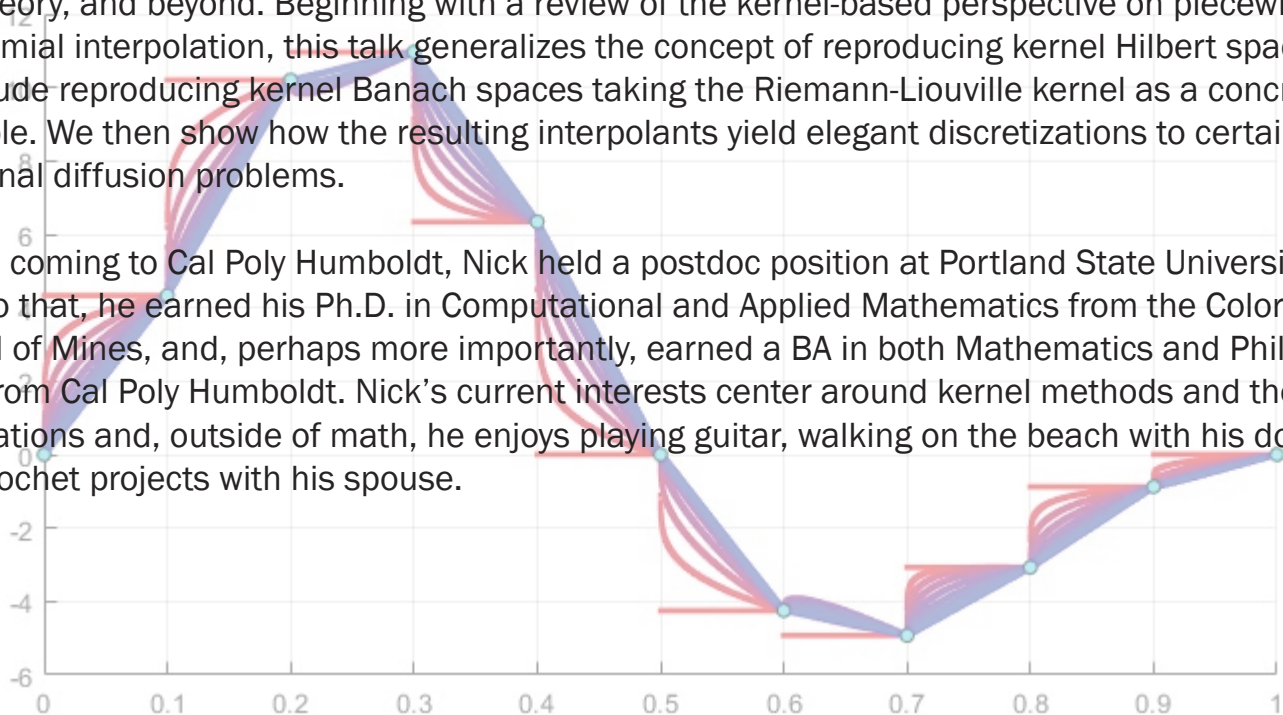
An introduction to interpolation with Riemann-Liouville kernels

Dr. Nick Fisher

**Department of Mathematics & Data Science
Cal Poly Humboldt**

Reproducing kernel Hilbert space methods have seen wide use across data science, approximation theory, and beyond. Beginning with a review of the kernel-based perspective on piecewise polynomial interpolation, this talk generalizes the concept of reproducing kernel Hilbert spaces to include reproducing kernel Banach spaces taking the Riemann-Liouville kernel as a concrete example. We then show how the resulting interpolants yield elegant discretizations to certain fractional diffusion problems.

Before coming to Cal Poly Humboldt, Nick held a postdoc position at Portland State University. Prior to that, he earned his Ph.D. in Computational and Applied Mathematics from the Colorado School of Mines, and, perhaps more importantly, earned a BA in both Mathematics and Philosophy from Cal Poly Humboldt. Nick's current interests center around kernel methods and their applications and, outside of math, he enjoys playing guitar, walking on the beach with his dog, and crochet projects with his spouse.



THURSDAY
Sep. 17, 2026

4:00 PM
BSS302

FOR MORE INFO GO TO <https://math.humboldt.edu/get-involved/mathematics-colloquium>

**We cordially invite you to the PRE-COLLOQUIUM TEA in BSS#312
at 3:30 PM**