

PARADIM partners with NIST to host first 2D Data Framework Training Workshop

PARADIM has taken a leading role in community efforts to harness the revolution in the scale and scope of data in the materials domain.

The 2D Data Framework (2DDF) provides a structure to develop and disseminated data-intensive approaches and skills throughout our userbase and beyond.

The first training workshop engaged 26 students and postdocs from across DMREF and EFRI 2-DARE projects focused on two-dimensional materials. Participants had 4.5 days of instruction and problem solving led by the Hopkins and NIST team. The curriculum included basics of data-science environments using python and SQL utilizing the PARADIM Data Collective containerized environment built on the NSF funded, Big Data architecture SciServer. Topics included data wrangling, use of common materials APIs, and an introduction to atomistic calculations from the notebook environment.

Dissemination of the training tools and computing environments created for the workshop has set the stage for a 2019 PARADIM Summer School on Materials Growth and Design: Discovery in the Era of Big (Materials) Data.

Elbert, Phelan, and McQueen, Johns Hopkins University

