Leon Ehrenpreis, Temple University

Parametric and Nonparametric Radon Transforms.

The Radon transform can be thought of as the use of the characteristic functions of planes as a "basis for all functions. This idea appears in both a parametric and nonparametric representation for the planes. The parametric form leads to connections with partial differential equations while the nonparametric form can be formulated for algebraic surfaces instead of planes.

These ideas will be persued.