

# An invitation to projection methods

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## **Abstract**

Feasibility problems, i.e., finding a solution satisfying certain constraints, are common in mathematics and the natural sciences. If the constraints have simple projectors (nearest point mappings), then one approach is to use these projectors in some algorithmic fashion to approximate a solution.

In this talk, I will survey three methods (alternating projections, Dykstra, and Douglas-Rachford), and comment on recent advances and remaining challenges.