## Linear inequalities, projection methods and the convex feasibility problem

Aviv Gibali

ORT Braude College, Israel

Felix Klein Autumn Workshop "Continuous Optimization", September 16-18, 2020 organized by the Fraunhofer Institute for Industrial Mathematics ITWM in Kaiserslautern, Germany

## Abstract

Linear inequalities appear naturally in many real-world scenarios. The problem has a geometric interpretation of finding a point in the intersection of half spaces defining by these inequalities.

We will discuss a special class of iterative methods that use different kinds of projections to solve this and more general the so-called convex feasibility problem.