

Abstract: A designer is privately informed about the state and chooses an information disclosure mechanism to influence the decisions of multiple agents playing a game. We define an intuitive class of incentive compatible mechanisms which we coin interim optimal mechanisms. We prove that an interim optimal mechanism exists, and that it is an equilibrium outcome of the interim information design game. An ex-ante optimal mechanism may not be interim optimal, but it is whenever it is ex-post optimal. We provide a belief-based characterization of interim optimal mechanisms and compare them with ex-ante and ex-post optimal mechanisms in common economic environments. In leading settings in which action sets are binary, every ex-ante optimal mechanism is interim optimal. We also relate interim optimal mechanisms to other solutions of informed principal problems.