Characterization of read-write computability (M1/M2)

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What is computable in a given model is one of the most intriguing questions in distributed computing. The goal of this project is to characterize the sequential objects that allow for wait-free linearizable read-write implementations. Our initial idea is to express the object's behavior via a *meet semi-lattice* that accounts for "compatible" schedules of concurrent operations.

For students interested in theoretical foundations of distributed computing, certain mathematical background will help.

References:

- Wait-free synchronization: https://dl.acm.org/doi/10.1145/114005.102808
- PRAM universal construction: https://cs.brown.edu/people/mph/AspnesH90/p340-aspnes.pdf