

**Gil Goffer**, *University of California, San Diego* – **January 28<sup>th</sup>, 2025**

**Title:** Analysis of relations in groups

**Abstract:** I'll demonstrate how careful analysis of group relations yields unexpected constructions, addressing several central questions in group theory. These include a longstanding question by Wiegold on invariably generated groups, a series of questions by Amir, Blachar, Gerasimova, and Kozma concerning algebraic group laws, and a question by Elliott, Jonusas, Mesyan, Mitchell, Morayne, and Peresse regarding Zariski topologies on groups and semigroups.