

Algebra Seminar

Title: Heyting Algebras and Constructive Mathematics

Speaker: Dr. Robert Lubarsky

Time and Venue: 3/22/2023 at 4 pm, in SE 215.

Abstract: In the seminar so far there has been a lot of talk of frames. A slight extension of the concept of a frame is a Heyting algebra. Heyting algebras can be used to model constructive, as opposed to classical, mathematics, which is mathematics without the use of Excluded Middle, the assertion that every statement is either true or false. I will discuss the use of some Heyting algebras to model some constructive, non-classical principles, and also show that the failure of some classical principles requires in some sense certain Heyting algebras.