David H Crombecque* (crombecq@usc.edu), 3620 S.Vermont Avenue, KAP 104, Los Angeles, CA 90089. Introduction to Proofs in Topology and Geometry Using IBL. Preliminary report.

Working in a program that does not offer an Introduction to Mathematical Proofs for undergraduate Math Majors, we have been using a sequence of two classes, Geometry as well as Modern Topology, to develop problems and activities using IBL to develop students' proof skills. The choice of problems and activities lead students to think about various common mathematical questions necessitating a common approach: e.g showing existence or non existence of a mathematical object, unicity, independence of choice. In this talk, we will give a sample of such questions students have to tackle in the class while discovering a fun new mathematical world. (Received September 22, 2015)