

From Inductive Reasoning to Mathematical Induction with Geometry Expressions

Philip Todd

Saltire Software, Oregon, USA

Dynamic Geometry systems facilitate inductive reasoning, as the student makes conjectures from the interactive diagram. Such conjectures are either left unproved or proved by conventional means. Symbolic Geometry systems such as Geometry Expressions allow the student both to make more elaborate conjectures and to prove them.

In this beginner level workshop we will learn how to use constraints in Geometry Expressions to specify a model symbolically and how to extract algebra to make and prove a conjecture about Pappus Chains.