1116-VE-699 Zengxiang Tong* (ztong@otterbein.edu), Department of Mathematical Sciences, Otterbein University, Westerville, OH 43081, Jingzhong Zhang (ztong@otterbein.edu), Guangzhou University, Guangzhou, Guangdong, Peoples Rep of China, and Zhaozhi Zhang (ztong@otterbein.edu), The Journal of Research in Advanced Mathemati, Northwest Poly Technology University, Xi'An, Shanxi, Peoples Rep of China. Area Methods in Geometry Proving. Preliminary report.

Though Euclid (300 B.C.) used an area comparison to prove Pythagorean Theorem in his Elements, this approach has never been popular in geometry proving. This presentation uses several intriguing examples to show that the area method is a fundamental method in geometry proving and it provides a new approach in organizing our geometry structure, which can help students to learn more effectively. (Received September 10, 2015)