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Jason Saied* (saiedj@lafayette.edu), Math Dept, Lafayette College, Easton, PA 18042, and **Dantong Zhu**. *Outer Automorphisms of S_6 Acting on Combinatorial Structures*. Preliminary report.

S_6 is the only symmetric group with outer automorphisms. These curious objects have gotten a lot of attention recently, with researchers trying to understand their structure and how they act on various objects. We will look at the action of the outer automorphisms on combinatorial objects, including finite geometry and root systems. (Received September 22, 2015)