1035-20-594   **Jenya Sapir*** (`jmsapir@uchicago.edu`) and **Alison Gordon** (`amgordon@UDel.edu`).
Centralizers in R. Thompson's group V.

This work was done in collaboration with Collin Bleak, Garrett Graham, Jacob Hughes and Hannah Newfield-Plunkett.

Given an element g in R. Thompson's group V, we classify its centralizer. We build upon previously known solutions of the conjugacy problem in V, as well as solutions to the centralizer problem for its subgroups F and T, to construct elements in the centralizer. This construction depends on the dynamics of the action of g on the cantor set, so the cases where g is torsion and where it is non-torsion are considered separately. Examination of this construction produces the group structure desired. (Received September 11, 2007)