Alexander Woo* (woo@stolaf.edu), 1520 Saint Olaf Avenue, Northfield, MN 55057, and Henning Ulfarsson. Local complete intersection Schubert varieties. Preliminary report.

We characterize Schubert varieties which are local complete intersections (lci) by pattern avoidance conditions. For the Schubert varieties which are local complete intersections, we give an explicit minimal set of equations cutting out their neighborhoods at the identity. Although the statement only requires ordinary pattern avoidance, showing the other Schubert varieties are not lci appears to require working with interval pattern avoidance. The Schubert varieties defined by inclusions, originally introduced by Reiner and Gasharov, turn out to be an important subclass. (Received September 20, 2010)