1135-35-1938 **Patrick Guidotti***, Department of Mathematics, 340 Rowland Hall, University of California, Irvine, CA 92697-3875. *Domain Variations and Moving Boundary Problems.*

In recent decades maximal regularity techniques have been successfully applied to the analysis to a variety of moving boundary problems. A common feature of this approach is the use of a domain fixing transformation, known as the Hanzawa transformation. In this talk, a geometrically motivated alternative transformation is proposed. Among its benefits are more transparent representations for the linearizations required for the applications of maximal regularity results. The description of the new transformation will be complemented by the discussion of a prototypical application. (Received September 25, 2017)