1127-49-197 **Tiziana Giorgi*** (tgiorgi@nmsu.edu), **Carlos J García-Cervera** and **Sookyung Joo**.

Analysis of Landau-de Gennes functionals for the $B_{1RevTilted}$ phase of bent-core liquid crystals.

The $B_{1\mathrm{RevTilted}}$ is a columnar phase proper of bent-core molecule liquid crystals in which is possible to reorient the spontaneous polarization by applying an electric field. Experiments indicate that the reorientation can be achieved by either a rotation around the smectic cone or the molecular axis or a combination of both. We present a Gamma-convergence result for an energy introduced in the physics literature to model these experiments, and a comparison with a similar functional also used to study bent-core liquid crystals. (Received February 03, 2017)