

Currents with coefficients in a group and the Steiner Problem

Annalisa Massaccesi and Andrea Marchese

The Steiner problem consists in finding the shortest connected set including some fixed points; we show how this problem could be solved as a mass-minimizing problem for 1-dimensional rectifiable currents with coefficients in a suitable group. Thanks to the representation adopted for these currents, we can exploit the calibration method and we can analyse some examples.