

Errors and omissions: Rearrangement inequalities

March 2010

- **Fig. 3.2, p. 27:** In the top row, the pictures on the left and right should show the function concentrated near the south pole (not the north pole), see Fig. 3.1 on p. 26 .
(Thanks to Marc Fortier.)
- **After Section 3.2, p. 31:** Add new section on random symmetrizations. Discuss results of Mani-Levitska, van Schaftingen, Volčič.
- **Proof of Theorem 4.7, p. 37:** For $p = 1$, the proof by polarization is not complete. We need to show that the weak limit g is in $W^{1,p}$ (not just in BV), i.e., $|\nabla g|$ is an integrable function (not just a measure). We need to use the concentration inequality from Exercise 4.9.
(Thanks to Etienne Sandier.)
- **Section 5.2, p. 44:** Need to add reference to Gromov, and discuss recent results of Figalli/Maggi/Pratelli.
- **After Section 5.3, p. 47:** Add section on Barthe's proof of Young's inequality.