0.1 The Banach-Tarski Paradox

This week we finally see the full Banach-Tarski Paradox.

0.2 To Present

- I would like to see the proof of the Banach-Tarski paradox (Corollary 3.10) for solid balls. I want to see:

  1. The proof that $B_1(0)$ is equidecomposable with $B_1(0) \setminus \{0\}$. This involves reproducing the proof of Theorem 3.9. I want to see all the details for this case.
  2. Then, using (1.) and Theorem 3.9, I want to see how the proof goes. If you are not quoting (1.) or Theorem 3.9, I want to see the details.

- I would also like to see all the details of the proof of the "Strong Form" of the Banach-Tarski paradox (Theorem 3.11 in the book). This proof uses the Banach-Schröder-Bernstein Theorem (3.5 in the book). So please make sure that you understand all the details of Theorem 3.5 (we did them together, but make sure you can write them down yourself).

As usual, just do your best. It is OK to come to the meeting and say, I understood these things, but this, this, and that were confusing.