

Exercise 0. This week is a good time to catch up with all the previous exercises from past weeks that are still resisting you.

Exercise 1. Take time to go over the proof of the existence of the (left) Haar measure. Pay special attention to all the places where you feel that it is “intuitively right” but are not sure if you can see the 100% formal argument (because this is often a sign that a problem is hiding). Make sure that you agree with the overall logic of the proofs. For instance, in the super-additivity up to ϵ proposition, check why we can choose δ, η the way we claim we can.

Exercise 2. If you still have more time and energy, proceed as for Ex. 1 but for the uniqueness (up to constants) statement.