## Algebra 2010-Aalborg University

7th Lecture: Tuesday October 5th, 8:15-12:00 at room G5-112.

- 8:15-8:45 Repetition from last lecture. More examples of groups. Subgroups and cosets (pages 57-64)
- 8:45-10:30 Work in groups. Check that the two definitions of subgroup H ⊂ G in Definition 2.2.1 (page 61) are equivalent. Can the neutral element of H be different from the neutral element of G?. Exercises from [Lau], 2.11 (page 104): 10, 11, 12 (only the first question), 15 (only (i) and (ii)), 8, 9.
- 10:30-12:00 Lecture: Normal subgroups. Quotient groups of the integers. The multiplicative group of prime residue classes. Group homomorphisms (pages 64–70)

Best regards,

Diego Ruano