

# Algebra 2010-Aalborg University

**3rd Lecture:** Wednesday September 15th, 8:15-12:00 at room G5-112.

- 8:15-8:45 Repetition from last lecture. It will be directed by group G3-112. The Euclidean algorithm. The Chinese remainder theorem (pages 9-15).
- 8:45-10:30 Work in groups. Exercises from [Lau], 1.12 (page 41): 12–16. For exercise 12 you may consider other integers besides 89 and 55, for instance some negative integers. Read exercise 17 and think about how you could solve it: we have not seen the theorem that will allow us to solve it but we are about to do it.
- 10:30-12:00 Lecture: The Chinese remainder theorem. Euler's theorem,  $\varphi$  function (pages 16-22).

Best regards,

Diego Ruano