

**Session 11, March 28, 2011, 12:30–16:15****Program**

1. 12:30–14:00 in G5-112. I continue with the power series, section 3 in [AJ]. The relation between analytic functions and holomorphic functions will be explained.
2. 14:00–16:15 in groups. See the list of exercises below. Note that there is extra time for solving problems today.

**Exercises** Solve the exercises in the order posed.

1. From [AJ] section 3.1 Exercises 1, 2, 3, 4. Comment on Exercise 2: We define  $\cos(z)$  and  $\sin(z)$  for  $z \in \mathbf{C}$  as

$$\cos(z) = \frac{1}{2}(e^{iz} + e^{-iz}) \quad \text{and} \quad \sin(z) = \frac{1}{2i}(e^{iz} - e^{-iz}).$$

2. Trial Exam June 2005, Opgave 3.
3. Exam June 2006, Opgave 4.

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