

**Session 12, March 31, 2011, 12:30–16:15****Program**

1. 12:30–14:00 in G5-112. I will go through the definitions and the properties of contour integrals in the complex plane, section 4 in [AJ].
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 6, 8, 9, 10.
2. The exercises on the list below.
3. Exam June 2008, Opgave 4.
4. Re-Exam August 2008, Opgave 4.

**Problem list.** For each of the power series below determine its radius of convergence.

1.  $\sum_{n=0}^{\infty} e^{in} z^n.$

2.  $\sum_{n=0}^{\infty} (1+i)^n z^n.$

3.  $\sum_{n=0}^{\infty} \frac{1}{1+in} z^n.$

Arne Jensen