

LECTURE 7

FOURIER SERIES *continued*

- Convergence of Fourier series
 - Result about piecewise smooth functions
 - Result about jump
 - Relation between smoothness and decay of the coefficients
- Half range expansions
 - Odd and even periodic prolongations
 - Half range expansion
 - Discuss midtermtest TMA4130/35 16.10.2004 opp. 5,6,7
 - Applications: evaluation of numerical series
- Functions of the period $p = 2L$

Complex numbers (*refreshment*)