MATHEMATIKKOLLOQUIUM

Das Institut für Mathematik lädt zu folgendem Vortrag ein:

Jasson Vindas

Pointwise Fourier inversion formula for tempered distributions

In this talk a pointwise Fourier inversion formula is presented. For tempered distributions, we will give sense to the formula

$$f(x_0) = \frac{1}{2\pi} \int_{-\infty}^{\infty} \hat{f}(t) e^{-itx_0} dt,$$

pointwise.

R. Estrada has characterized the point values of periodic distributions by the summability of its Fourier series by not only considering the partial sums over symmetric interval but by considering it over asymmetric intervals (see R.Estrada, Characterization of the Fourier series of distributions having a value at a point, *Proc. Amer. Math. Soc.* **124** (1996), 1205-1212). In this talk, we will present a generalization of Estrada's result which also characterizes the distributional point values of tempered distributions. Eventually, some recent results about the order of summability of this pointwise Fourier inversion formula will be discussed.

Zeit: **Mittwoch, den 22. November 2006 um 16^{30} Uhr**

Ort: **Technikerstrasse 13, 6. Stock, Seminarraum B 619**

Peter Wagner

Gäste sind herzlich willkommen!