



# SCAN'2012

**It starts!**



# SCAN'2012

The 15<sup>th</sup> International GAMM-IMACS  
Symposium on Scientific Computing,  
Computer Arithmetics and Verified  
Numerical Methods

Novosibirsk, September 23-29, 2012

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and, in particular, in Novosibirsk  
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Interval analysis and verified numerical  
computations have deep roots  
in our scientific life and culture.

# Vladimir M. Bradis (1890-1975)



Pedagogue and mathematician



# Vladimir M. Bradis (1890-1975)

Vladimir Bradis invented and elaborated the “method of bounds” for approximate calculations.

It is equivalent to interval computations.

- Брадис В.М. Опыт обоснования некоторых практических правил действий над приближёнными числами // Известия Тверского педагогического института. – 1927. – Вып. 3.
- Брадис В.М. Теория и практика вычислений. Пособие для высших педагогических учебных заведений. – Москва: Учпедгиз, 1937.
- Брадис В.М. Средства и способы элементарных вычислений. – Москва: Издательство Академии педагогических наук РСФСР, 1948.

# Leonid V. Kantorovich (1912-1986)



Mathematician and economist



# Leonid V. Kantorovich (1912-1986)

Leonid Kantorovich, a co-inventor of linear programming, is also a pioneer of the “set-membership approach”  
in data processing:

L.V. Kantorovich, On some new approaches to computational methods and observation processing, *Siberian Math. Journal*, 3 (1962), N° 5, pp. 701-709.

# Nikolay N. Yanenko (1921-1984)



Mathematician and mechanician

# Nikolay N. Yanenko (1921-1984)

Nikolay Yanenko is “father of the fractional steps methods”, popular decomposition method for numerical solution of PDEs.

It was he who initiated researches in interval analysis in Novosibirsk in 60's.

# Yuri I. Shokin



Director of Institute of Computational  
Technologies

Yu.I. Shokin, *Interval Analysis*,  
Novosibirsk, Nauka, 1981.



– the first Russian book on interval analysis,  
was published in Novosibirsk

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A good tradition of our scientific community is biannual R.E. Moore Prize awarded for the best work on applications of interval methods.

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This year, R.E. Moore Prize is awarded to Prof. Luc Jaulin (ENSTA-Bretagne, Brest, France) for his work on interval methods in underwater robot navigation.