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“Fractional Differentiation and its Applications 2014”

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AIMS AND SCOPE

Primary topics of FCAA:

- Fractional Calculus (FC)
- Special Functions and Integral Transforms, related to FC
- Fractional Order Differential and Integral Equations and Systems
- Mathematical Models of Phenomena, described by the above tools

Secondary topics of Applied Mathematical Analysis, *iff* related to FC:

- Algebraic Analysis, Operational and Convolutional Calculi
- Generalized Functions, Harmonic Analysis
- Numerical and Approximation Methods, Computational Procedures and Algorithms, related to the Primary FCAA topics
- Fractional Stochastic Processes
- Fractal and Integral Geometry (if related to FC)

Applications of these techniques to:

- Differential and Integral Equations,
- Problems of Mathematical Physics
- Control Theory, Mechanics, Probability and Statistics, Finances, Engineering, Biomedicine, etc.

Other contributions:

- If revealing connections between FC and the above-mentioned topics to model problems of the real physical and social world

Suggested MSC 2010 entries:

- 26A33; 33E12, 34A08, 34K37, 35R11, 60G22 (primary)
- 30C45, 30E15, 31B15, 33C60, 33E30, 34A25, 42A45, 42C10, 44A20, 44A35, 44A40, 45E10, 93B60, 93D09, 05C72, etc.

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- Reviews on Books, Proceedings, etc.
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