



Solve Nonlinear Systems of Pdes by Order Completion: Can There Be a General Nonlinear Pde Theory for Existence and Regularity of Solutions ? (Paperback)

By Prof Elemer Elad Rosinger

Createspace, United States, 2014. Paperback. Book Condition: New. 229 x 152 mm. Language: English . Brand New Book ***** Print on Demand *****.Contrary to widespread perception, there has ever since 1994 been a unified, general, that is, type independent theory for the existence and regularity of solutions for very large classes of nonlinear systems of PDEs, with possibly associated initial and/or boundary value problems, see [21,22], and for further developments [1-3,47-56,58,64-66]. This solution method is based on the Dedekind order completion of suitable spaces of piece-wise smooth functions on the Euclidean domains of definition of the respective PDEs. All the solutions obtained have a blanket, universal, minimal regularity property, namely, they can be assimilated with usual measurable functions or even with Hausdorff continuous functions on the respective Euclidean domains. It is important to note that the use of the order completion method does not require any monotonicity conditions on the nonlinear systems of PDEs involved. One of the major advantages of the order completion method is that it eliminates the algebra based dichotomy linear versus nonlinear PDEs, treating both cases equally. Furthermore, the order completion method does not introduce the dichotomy monotonous versus non-monotonous PDEs. None of the known functional...

Reviews

An exceptional pdf and the typeface utilized was fascinating to read through. It can be written in straightforward words and phrases instead of confusing. I am just quickly could possibly get a delight of looking at a written ebook.

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It is in a single of the best book. This is for those who state there had not been a well worth reading through. Once you begin to read the book, it is extremely difficult to leave it before concluding.

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