

Hot Stuff: From Iron Making Furnaces via Inverse Problems to Finance

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We plan to show how basic research (in our case, on inverse problems) can be closely linked to applications in industry by reporting about a long-term project concerned with modelling and simulation of the processes in iron making furnaces and its methodological links to problems of pricing complicated financial derivatives. We also describe our organizational basis, consisting of a university institute (www.indmath.uni-linz.ac.at), an Academy of Sciences Institute (www.ricam.oeaw.ac.at) and a spinoff company (www.mathconsult.co.at) and their interplay. Finally, we will also discuss how to make cooperation between mathematics and industry more efficient on a European scale.

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