



JOINT SEMINAR ONLINE

on

COMPLEX AND HYPERCOMPLEX ANALYSIS OPTIMIZATION, GRAPH THEORY AND COMBINATORICS,

and

TL on INVERSE PROBLEMS IN HEALTH SCIENCES

ZOOM link:

<https://videoconf-colibri.zoom.us/j/81051404852?pwd=L3N1SzR4aER6dmVYd3dMYSSvYXV6dz09>

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White box instead of black: distilling interpretable mathematical models using machine learning

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Machine learning is a very popular instrument for industry and science today. But models that are constructed by traditional machine learning are difficult to interpret. They are called black boxes. In my report, I discuss the use of new machine learning algorithms that would allow the construction of interpretable models like equations or nonlinear formulas in finite combinations of elementary functions automatically. It might be a more powerful advance even than traditional machine learning for applied mathematics and could help us to construct new mathematical models and solve old mathematical problems.

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