Characterizing shapes and motions - How can computer vision and deep learning help with astronomy image analysis?

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Résumé

Scientific images, be it astronomical or medical, share surprisingly similar properties and challenges. This talk will present our recent and ongoing work on scientific image analysis, and we will examine the requirements they impose on the design of new computer vision-based analysis methods. We will particularly consider deep learning methods, which have been so far predominantly developed for natural images, and we will discuss the potential for this paradigm in enhancing the interpretation and exploitation of astrononmy images.

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