PHYSICS-INSPIRED GAP FILLING IN MASSIVE SPATIAL DATA

for more efficient automated process

MILAN ŽUKOVIČ
UFV PF UPJŠ

9.10.2019
VKM room

16:00
Start!

An ever-increasing amount of data calls for
the development of new efficient techniques of gap filling...
...inspired by statistical physics.

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Abstract: An ever increasing amount of data collected by various remote sensing technologies as well as the need or their efficient (near real time) processing call for development of new techniques. Traditional geostatistical methods used to fill gaps (predict missing values), which often appear in spatial data due to different reasons, are impractical if not useless in case of massive data sets due to their computational inefficiency, restrictive assumptions, as well as various user-defined, hence subjective choices. We have recently proposed novel techniques, inspired by spin models from statistical physics, which greatly alleviate the above limitations. Furthermore, they are highly parallelizable on GPUs and thus appear promising for efficient and automated processing of huge raster data sets, such as satellite and radar images.

Ústav fyzikálnych vied

Data Analytics Meetings

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