



De: CRM crm@crm.umontreal.ca
Objet: ***AUJOURD'HUI*** / CSMQ = Stéphane Jaffard
Date: 27 novembre 2015 09:29
À: activites@CRM.UMontreal.CA

COLLOQUE DES SCIENCES MATHÉMATIQUES DU QUÉBEC - MONTRÉAL
<http://www.crm.umontreal.ca/Colloques/index.html>

DATE :
Le vendredi 27 novembre 2015 / Friday, November 27, 2015

HEURE / TIME :
16 h / 4:00 p.m.

CONFERENCIER(S) / SPEAKER(S) :
Stéphane Jaffard (Université de Paris Est)

TITRE / TITLE :
Measuring irregularities in data : Can fractals help to classify Van Gogh paintings?

LIEU / PLACE :
[CRM, UdeM, Pav. André-Aisenstadt, 2920, ch. de la Tour, salle 6214](#)

RESUME / ABSTRACT :
Benoît Mandelbrot defined fractal geometry as the geometry of irregular sets; he and his followers successfully used the mathematical concepts of fractional dimensions to quantify this irregularity and thus popularized new classification tools among scientists working in many disciplines. Recently, these ideas have proved very fruitful in multifractal analysis, which deals with the analysis of irregular functions. We will show how the seminal ideas introduced in fractal geometry have been diverted in order to supply new classification tools for signals and images, and we will present a selected choice of applications including:

- Model classification in the context of fully developed turbulence and the diagnostic of heart-beat failure.
- Modeling of internet flow
- Stylometry tools helping art historians to differentiate between the paintings of several masters.

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