# **Building-up Differential Homotopy Theory**

- Date : Monday 4th  $\sim$  Thursday 7th of March, 2019
- Venue : D-413 IMI Auditorium

West 1 Bld., Kyushu University, Motooka 744, Nishi-ku, Fukuoka, Japan.

Access : https://www.math.kyushu-u.ac.jp/pages/access.html

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# Schedule

# **Monday 4th of March**

 $9:20 \sim 9:30$ Opening  $9:30 \sim 10:55$ Patrick Iglesias-Zemmour (Aix-Marseille Université & the Hebrew University) Inception of Diffeology  $11:00 \sim 12:00$ Free Discussion on Differentiable Structures  $14:20 \sim 15:10$ Takahiro Matsuyuki (Tokyo Institute of Technology) Moduli space of Chen's connections and characteristic classes  $15:30 \sim 16:20$ Akira Koyama (Waseda Unversity) Homological properties of decomposition spaces  $16:40 \sim 17:30$ Kazuhisa Shimakawa (Okayama University) Generalized functions and Diffeology

# **Tuesday 5th of March**

$9:30 \sim 10:30$	Tadayuki Haraguchi (Naragakuen University)
	A homotopy structure of diffeological spaces
11:00 ~ 12:00	Jun Yoshida (Tokyo Institute of Technology)
	Diffeological spaces in view of functors of points
14:30 ~ 15:30	Patrick Iglesias-Zemmour (Aix-Marseille Université & the Hebrew University)
	Constructions in Diffeology I
$16:00 \sim 17:00$	Serap Gürer (Galatasaray University)
	Differential Forms on Stratified Spaces

#### Wednesday 6th of March

$10{:}00 \sim 11{:}00$	Shun Wakatsuki (University of Tokyo)
	Gorenstein spaces and string topology
13:00 ~ 14:30	Patrick Iglesias-Zemmour (Aix-Marseille Université & the Hebrew University) Constructions in Diffeology II
15:00 ~ 16:00	Serap Gürer (Galatasaray University) Differential Forms on Manifolds with Boundary and Corners
$18{:}00\sim20{:}00$	Dinner at Ten-Ten in Ito Campus

### **Thursday 7th of March**

$10{:}00 \sim 11{:}00$	Hiroshi Kihara (University of Aizu)
	Smooth homotopy of infinite dimensional $C^\infty$ -manifolds
13:00 ~ 14:30	Patrick Iglesias-Zemmour (Aix-Marseille Université & the Hebrew University) Constructions in Diffeology III
14:30~14:40	Closing

On Friday 8th, Patrick Iglesias-Zemmour has kindly agreed to have a special informal session with all of us to discuss on Diffeology and its relationship with Homotopy Theory. After that, we are planning to visit Yanagawa to continue to discuss more about Diffeology under 'Sagemon' – one of most popular touristic places in Kyushu in March. Details will be announced in the web-page.

#### **Organisers:**

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