

# Building-up Differential Homotopy Theory 2024 in Osaka

Date : **Monday 4th ~ Thursday 7th of March, 2024**

Venue : **A12 Science Hall, Nakamozu Campus, Osaka Metropolitan University**  
Nakamozu Campus, Osaka, Japan.

Access : <https://www.omu.ac.jp/en/about/access/#02>

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## Schedule

“\*\*\*” indicates an on-line lecture.

### Monday 4th of March

- 9:30 ~ 9:45 Reception and Opening
- 9:45 ~ 10:45 **Shoji Yokura** (Kagoshima University)  
*On stratified spaces*
- 11:00 ~ 12:00 **Paolo Giordano** (University of Vienna)  
*A conceptual introduction to Schwartz distributions and Colombeau generalized functions*
- 14:00 ~ 15:00 **Kazuhisa Shimakawa** (Okayama University)  
*Nonstandard diffeology and generalized functions*
- 15:15 ~ 16:15 **Yukihiro Okamoto** (Kyoto University)  
*Construction of string homology of submanifolds by de Rham chains*
- 16:30 ~ 17:30 **Jean-Pierre Magnot** (University of Angers)  
*On the geometry of equation manifolds \*\*\**

### Tuesday 5th of March

- 9:45 ~ 10:45 **Shun Wakatsuki** (Nagoya University)  
*DGA models in rational homotopy theory and their computation*

- 11:00 ~ 12:00    **Paolo Giordano** (University of Vienna)  
*How to deal with continuous functions as if they were smooth: Generalized smooth functions*
- 13:45 ~ 14:00    Group Photo (all of us)
- 14:00 ~ 15:00    **Atsushi Yamaguchi** (Osaka Metropolitan University)  
*Representations of groupoids in the category of plots*
- 15:15 ~ 16:15    **Enxin Wu** (Shantou University)  
*Some open questions related to diffeological vector spaces*
- 16:30 ~ 17:30    **Patrick Iglesias-Zemmour** (The Hebrew University of Jerusalem)  
*Example of Singular Reduction in Symplectic Diffeology*

### Wednesday 6th of March

- 9:45 ~ 10:45    **Kei Irie** (Kyoto University)  
*Chain level string topology and de Rham chains \*\*\**
- 11:00 ~ 12:00    **David Miyamoto** (Max Planck Institute for Mathematics)  
*Lie groupoids determined by their orbit spaces*

### Thursday 7th of March

- 9:45 ~ 10:45    **Hiroshi Kihara** (The University of Aizu)  
*Categorical algebra of fiber bundles*
- 11:00 ~ 12:00    **Paolo Giordano** (University of Vienna)  
*Ideas about the Grothendieck topos of generalized smooth functions*
- 12:00 ~ 12:30    Closing

### Organisers:

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