Second workshop on the modeling of turbidity currents and related gravity currents

May 31st

6:00 Registration and informal welcome reception at the Best Western hotel

June 1st

| 8:30 | Registration | | | | |
|---------------------------------------------------------------------------|--------------|-----------------------|-------------------------------------------------------------------------------------------------------------------------------|--|--|
| 9:00 | Welcome | | | | |
| 9:15 | 1 | Cantero <i>et al.</i> | Turbulence modulation in turbidity currents as a response to slope break and its implication for massive sedimentary deposits | | |
| 9:45 | 2 | Parker <i>et al.</i> | Transverse bed morphology in meandering rivers and submarine channels sculpted by turbidity currents | | |
| 10:15 | 3 | Chou & Fringer | Numerical simulation of turbulence-induced sediment transport and the resulting bedform dynamics | | |
| 10:45 | Coffee | | | | |
| 11:15 | 4 | Lesshafft et al. | Inverse modeling of sediment deposition from turbidity currents | | |
| 11:45 | 5 | Naruse & Olariu | Prediction of geometry of turbidite beds by inverse analysis of the flow condition | | |
| 12:15 | Lunch | | | | |
| 2:00 | 6 | Gonzalez-Juez et al. | Gravity current flow past a circular cylinder: forces, wall shear stresses and implications for scour | | |
| 2:30 | 7 | Nasr <i>et al.</i> | High-resolution simulations of turbidity currents flowing over complex topography | | |
| 3:00 | 8 | Lesshafft et al. | Sediment waves: linear instabilities in a turbidity current boundary layer | | |
| 3:30 | Coffee | | | | |
| 4:00 | 9 | Ozdemir <i>et al.</i> | The dynamics of fine sediment transport in the oscillatory boundary layer | | |
| 5:30 Reception on the balcony of the Marine Science Research Institute | | | | | |

June 2nd

| 8:45 | 10 | Wells et al. | The relationship between flux coefficient Gamma and entrainment ratio E in density currents |
|-------|--------------------------------------------------------|-------------------------|------------------------------------------------------------------------------------------------------------|
| 9:15 | 11 | Cossu & Wells | Turbulent flow characteristics in the bottom boundary layer of experimental density and turbidity currents |
| 9:45 | 12 | Nokes <i>et al</i> . | Why do slip and no-slip boundary gravity currents travel at different speeds? |
| 10:15 | Coffee | | |
| 10:45 | 13 | Nguyen & Kneller | Some measurements and analyses of positively buoyant small-scale gravity currents in laboratory |
| 11:15 | 14 | McElwaine | Dynamics of gravity current heads |
| 11:45 | 15 | Maurer & Linden | Intrusion-generated internal waves in a constantly stratified fluid |
| 12:15 | Lunch | | |
| 2:00 | 16 | Henniger <i>et al</i> . | Direct numerical simulation of particle settling in estuaries |
| 2:30 | 17 | Syvitski <i>et al</i> . | Hyperpycnal flows and the generation of continental shelf-traversing turbidity currents |
| 3:00 | Coffee | | |
| 3:30 | 18 | Burns <i>et al.</i> | Instability phenomena in stratified, particle-laden flow |
| 4:00 | Leave for Santa Barbara harbor | | |
| 4:30 | Channel Cat cruise, dinner on board of the Channel Cat | | |
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June 3rd

| 8:45 | 19 | Balachander & Lee | Lift force and particle resuspension mechanics |
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| 9:15 | 20 | Groenenberg <i>et al.</i> | A combined analog-numerical modeling study on the influence of relay ramps on the pathways of sediment delivery into rift basins |
| 9:45 | 21 | Puhl | Turbidity currents physical modeling at different scales: data parameterization through dimensional analysis and multiple regression models |
| 10:15 | Coffee | | |
| 10:45 | 22 | Manica <i>et al.</i> | Coupling flow and deposit properties of high-density turbidity currents based on experimental simulations |
| 11:15 | 23 | Buttles <i>et al.</i> | A physical model of submarine knickpoint evolution and erosion style in a cohesive sediment bed |
| 12:15 | Lunch | | |
| 14:00 | Round table | | |
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