

### **Blockage of saline intrusions in restricted, two-layer exchange flows across a submerged sill obstruction**

Cuthbertson, Alan; **Laanearu, Janek**; Carr, Magda; Sommeria, Joel; Viboud, Samuel Environmental fluid mechanics 2018 / p. 27-57 : ill <https://doi.org/10.1007/s10652-017-9523-2> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **Buoyancy-driven two-layer exchange flows across a slowly submerging barrier**

Cuthbertson, Alan; **Laanearu, Janek**; Davies, Peter A. Environmental fluid mechanics 2006 / p. 133-151 : ill [https://www.researchgate.net/publication/227110315\\_Buoyancy-Driven\\_Two-Layer\\_Exchange\\_Flows\\_Across\\_a\\_Slowly\\_Submerging\\_Barrier](https://www.researchgate.net/publication/227110315_Buoyancy-Driven_Two-Layer_Exchange_Flows_Across_a_Slowly_Submerging_Barrier)

### **Dense gravity currents in rotating, up-sloping and converging channel**

Cuthbertson, Alan; Davies, Peter; **Laanearu, Janek**; Wahlin, Anna Proceedings of VII International Symposium on Stratified Flows (ISSF2011), 22nd-26th of August, Rome, Italy 2011 [https://www.researchgate.net/publication/283792789\\_Dense\\_Gravity\\_Currents\\_in\\_a\\_Rotating\\_Up-sloping\\_Converging\\_Channel](https://www.researchgate.net/publication/283792789_Dense_Gravity_Currents_in_a_Rotating_Up-sloping_Converging_Channel)

### **Dense-water overflow in a converging and up-sloping channel**

**Laanearu, Janek**; Cuthbertson, Alan; Davies, Peter Proceedings of VII International Symposium on Stratified Flows (ISSF2011), 22nd-26th of August, Rome, Italy 2011

### **Dynamics of dense gravity currents and mixing in an up-sloping and converging vee-shaped channel**

**Laanearu, Janek**; Cuthbertson, Alan; Davies, Peter A. Journal of hydraulic research 2014 / p. 67-80 : ill <https://doi.org/10.1080/00221686.2013.841779> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **Experimental and analytical investigation of dense gravity currents in a rotating, up-sloping and converging channel**

Cuthbertson, Alan; **Laanearu, Janek**; Wahlin, Anna K.; Davies, Peter A. Dynamics of atmospheres and oceans 2011 / p. 386-409 : ill <https://www.sciencedirect.com/science/article/pii/S0377026511000467>

### **Experimental and numerical modelling of stratified exchange flows and blocking over a submerged sill**

Cuthbertson, Alan; Berntsen, Jarle; **Laanearu, Janek**; Asplin, Magdali 6th IAHR Europe Congress, Warsaw, Poland : abstract book 2021 / p. 237-238 : ill <https://iahr2020.pl/wp-content/uploads/2021/02/Book-of-Abstracts-15-02-2021.pdf>

### **Experimental studies of internal and near-bed dynamics of restricted exchange flows [Electronic resource]**

Carr, Magda; Cuthbertson, Alan; **Laanearu, Janek**; Sommeria, Joel; Kean, Jonathan; **Lilover, Madis-Jaak**; **Kollo, Monika**; Berntsen, Jarle; Thiem, Øywind; Viboud, Samuel E-proceedings of the 36th IAHR World Congress : 28 June - 3 July, 2015, The Hague, the Netherlands 2015 / p. 1-4 : ill

### **Experimental study of uni- and bi-directional exchange flows in a large scale rotating trapezoidal channel**

De Falco, Maria Chiara; Adduce, Claudia; Cuthbertson, Alan; Negretti, Maria Eletta; **Laanearu, Janek**; Malcangio, Daniela; Sommeria, Joel Physics of Fluids 2021 / art. 036602, 17 p. : ill <https://doi.org/10.1063/5.0039251> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **Experimental study on dynamical blocking conditions of net exchange flows**

**Laanearu, Janek**; Cuthbertson, Alan; Carr, Magda; Sommeria, Joel; **Lilover, Madis-Jaak**; Viboud, Samuel; Berntsen, Jarle VIIIth International Symposium on Stratified Flows : San Diego 2016 2016 / p. 1-8 : ill <http://escholarship.org/uc/item/48s7m6h9>

### **Gravity currents in rotating, topographically-controlled channels**

Cuthbertson, Alan; Davies, Peter A.; Chafik, Leon; Lundberg, Peter; **Laanearu, Janek**; Wahlin, Anna Proceedings of 3rd International Symposium on Shallow Flows (ISSF) : June 4-6, 2012, Iowa City, IA, USA 2012 / p. 146-155 : ill [https://www.researchgate.net/publication/283791457\\_Gravity\\_Currents\\_in\\_Rotating\\_Topographically-controlled\\_Channels](https://www.researchgate.net/publication/283791457_Gravity_Currents_in_Rotating_Topographically-controlled_Channels)

### **Gravity currents in rotating, wedge-shaped, adverse channels**

Cuthbertson, Alan; Lundberg, Peter; Davies, Peter A.; **Laanearu, Janek** Environmental fluid mechanics 2014 / p. 1251-1273 : ill <https://doi.org/10.1007/s10652-013-9285-4> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **Hydraulic formulae of two-layer exchange flow in an obstructed channel with trapezoidal cross-section**

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### **Hydraulic modelling of interfacial processes for two-layer maximal exchange**

**Laanearu, Janek**; Cuthbertson, Alan Proceedings of the 7th Europe Congress of the International Association for Hydro-environment Engineering and Research (IAHR), Athens, Greece, September 7 – 9, 2022 : Abstract Book 2022 / p. 305-306 <https://www.erasmus.gr/microsites/1227/book-of-abstracts>

### **Hydraulics of stratified sill flows within varying channel geometries : investigating energy loss and mixing of maximal two-layer exchange**

**Laanearu, Janek**; Cuthbertson, Alan Environmental fluid mechanics 2023 / p. 429-464 <https://doi.org/10.1007/s10652-022-09899-6> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

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### **Internal dynamics of a dense-water overflow in an up-sloping and converging vee-shaped channel**

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### **Mixing associated with density-driven exchange flow over estuarine barriers**

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### **Numerical modelling of the bottom gravity current in an obstructed channel with trapezoidal cross-section**

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### **Rotational effects on exchange flows across a submerged sill**

Cuthbertson, Alan; Brentsen, J.; **Laanearu, Janek**; Asplin, Magdeli Environmental fluid mechanics 2021 / p. 405-432 : ill <https://doi.org/10.1007/s10652-021-09779-5> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **The behaviour of dense gravity currents in a rotating channel with converging topography**

Cuthbertson, Alan; **Laanearu, Janek**; Davies, Peter; Wahlin, Anna Proceedings of the HYDRALAB III Joint Transnational Access User Meeting : Hannover, February 2010 2010 / p. 155-158 : ill [https://www.academia.edu/74207598/The\\_behaviour\\_of\\_dense\\_gravity\\_currents\\_in\\_a\\_rotating\\_channel\\_with\\_converging\\_topography](https://www.academia.edu/74207598/The_behaviour_of_dense_gravity_currents_in_a_rotating_channel_with_converging_topography)

### **The dynamics of bi-directional exchange flows**

Adduce, Claudia; De Falco, Maria Chiara; Cuthbertson, Alan; **Laanearu, Janek**; Malcangio, Daniela; **Kaur, Katrin**; Negretti, Eletta; Sommeria, Joel 6th IAHR Europe Congress, Warsaw, Poland : abstract book 2021 / p. 231-232 <http://iahr2020.pl/wp-content/uploads/2021/02/Book-of-Abstracts-15-02-2021.pdf>

### **The Dynamics of bi-directional exchange flows : implications for morphodynamic change within estuaries**

Adduce, Claudia; De Falco, Maria Chiara; Cuthbertson, Alan; **Laanearu, Janek**; **Kaur, Katrin** Trans-national Access in Hydralab+ : proceedings of the Joint User Meeting Bucharest - May 23, 2019 2019 / p. 19-26 : ill <https://hydralab.eu/assets/Proceedings-Hydralab-Joint-User-Meeting-May-23-Bucharest.pdf>