**Inertial Sensing Lab - publications**

**Peer-reviewed journals**

Larnder, C.I., [2019]: *Using smartphone portrait-landscape transitions to teach inclined-plane physics*. The Physics Teacher (submitted). [ [PDF](published/2018%2009%20SmartphoneTilt.pdf) ]

Larnder, C.I., [2019]: *Acceleration discontinuities in dry-friction oscillations*. American Journal of Physics **87**, 784. [ [DOI](https://doi-org/10.1119/1.5123455) ] [ [PDF](published/2019%2008%20AJP%20Discontinuities.pdf) ]

Larnder, C.I., [2020]: *A purely geometrical method of locating a smartphone accelerometer.* The Physics Teacher **58**, 52. [ [DOI](https://doi.org/10.1119/1.5141974) ] [ [PDF](published/2020%2001%20TPT%20PurelyGeometric.pdf) ] [ [arxiv preprint](https://arxiv.org/abs/1903.11516) ]

Larnder, C.I. et B. Larade, [2018]: *On the determination of accelerometer sensor positions within host devices.* American Journal of Physics **87**, 130. [ [DOI](https://doi-org/10.1119/1.5082536) ] [ [PDF](published/2019%2003%20AJP%20OnTheDetermination.pdf) ] [ [arxiv preprint](https://arxiv.org/abs/1903.10284) ]

Hinrichsen, P. et C.I. Larnder, [2018]: *Combined viscous and dry friction damping of oscillatory motion*. American Journal of Physics **86**, 577. [ [DOI](https://doi-org/10.1119/1.5034345) ] [ [PDF](published/2018%2008%20AJP%20CombinedViscous.pdf) ]

**Conferences**

Larnder, C.I. and E. Portelance [2019] : *La fabrication additive distribuée au service de l’éducation scientifique: l’étude de cas des laboratoires de physique basés sur l’utilisation des téléphones intelligents.* Colloque 603 « Enjeux globaux et locaux de l’innovation technologique ET sociale : réalités et potentiels des Living Labs, Fab Labs et labos citoyens » du congrès annuel de l’Association francophone pour le savoir (ACFAS). Ottawa, Ontario. [ [abstract and programme](https://www.acfas.ca/evenements/congres/programme/87/600/603/c?ancre=14097) ]

Larnder, C.I. [2018]: *Activités de physique avec accéléromètres mobiles*. Annual conference of the Association pour l’Enseignement de la Science et Technologie du Québec (AESTQ). Sorel, Québec.

Larnder, C.I. et E. Portelance [2018]: *Activités de physique avec accéléromètres mobiles*. Colloque collégiale of the Association pour l’Enseignement de la Science et Technologie du Québec (AESTQ). Sorel, Québec.

Larnder, C.I. [2018]: *Using smartphone tilt behaviours to teach physics*. Annual conference of the Supporting Active Learning and Technological Innovation in Science Education (SALTISE). Montréal, Québec.

Larnder, C.I. and M. Pagano [2017]: *The potential of mobile sensor technology in physics education*. Annual conference of the Supporting Active Learning and Technological Innovation in Science Education (SALTISE). Montréal, Quebec.

**Articles and other communications**

R. Moon [2018]: *Accelerated learning with smartphones in physics*. Online article hosted by ProfWeb. [ available online en francais or [in english](http://www.profweb.ca/en/publications/articles/accelerated-learning-with-smartphones-in-physics) ]

Larnder, C.I. [2019] : *3D-print technology for smartphone-based physics experiments*. Online article hosted by ProfWeb. [ available online en francais or [in english](https://www.profweb.ca/en/publications/real-life-stories/3d-print-technology-for-smartphone-based-physics-experiments) ]

Larnder, C.I. and E. Portelance [2019]: *Impression 3D : quel potentiel pour les laboratoires de physique?*. Webinar hosted by the Association pour les applications pédagogiques de l’ordinateur au postsecondaire (APOP). [ [online resource](https://apop.qc.ca/fr/capsule/impression-3d-quel-potentiel-pour-les-laboratoires-de-physique/) ]