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Hulya Arguz* (nuromur-hulya.arguz@ucsq.fr). *Advances on Gross–Siebert mirror symmetry and log Gromov–Witten theory.*

Mirror symmetry is a phenomenon arising from dualities in string theories, which is used by mathematicians to obtain predictions on Gromov–Witten invariants of Calabi–Yau varieties. An algebro-geometric approach to mirror symmetry, based on tropical and log geometric techniques, is provided by the Gross–Siebert program. In this talk we will review the most recent advances in this program, and report on joint work with Mark Gross ([arxiv:2007.08347](https://arxiv.org/abs/2007.08347)) in which we provide new algorithmic tools to compute (log) Gromov–Witten invariants of higher dimensional (log) Calabi–Yau varieties. (Received September 15, 2020)