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Imin Chen* (ichen@sfu.ca), Department of Mathematics, Simon Fraser University, Burnaby, BC V5A1S6, Canada, and **Yoonjin Lee** (yoonjin1@ewha.ac.kr), Department of Mathematics, Ewha Womans University, Seoul, 120-750, South Korea. *Explicit ramification bounds for division fields of Drinfeld modules.*

I will survey a number of results and applications, obtained with Yoonjin Lee, relating to the problem of explicitly bounding the different divisor of division fields of Drinfeld modules. In rank 2, this involves a detailed study of the Newton polygon and coefficients of the exponential functions associated to a Drinfeld module, making explicit the work developed by Gardeyn. For general rank, we provide a weaker substitute, and then apply both to the problem of obtaining explicit and partially explicit isogeny theorems for Drinfeld modules. (Received December 12, 2011)