Project Designator, Title, Abstract

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Designator: "wDuflo".

Title: "Ribbon 2-Knots, $1+1=2$, and Duflo's Theorem for arbitrary Lie algebras".

Having in mind "Ribbon 2-Knots, vertices, and Convolutions of Invariant Functions".

Abstract. By performing the calculation "1+1=2" on a 4D abacus, we explain in the most direct way we know how the study of "expansions", or "universal finite type invariants", for ribbon 2-knots leads to a proof of Duflo's theorem for arbitrary finite-dimensional Lie algebras. This complements the results of B-N, Le, and Thurston [BLT] where a similar argument using a 3D abacus and the Kontsevich integral was used to deduce Duflo's theorem yet only for metrized Lie algebras, and our results from [WKO2] which also imply a relation of 2-knots with the full Duflo theorem, though via a lengthier path.