

Meeting: 1003, Atlanta, Georgia, SS 15A, AMS Special Session on Quantum Topology, I

1003-17-1535 **Gwenael Massuyeau** and **Florin Felix Nichita*** (F.F.Nichita@swansea.ac.uk), Department of Mathematics, University of Wales Swansea, Singleton Park, SA2 8PP Swansea, Wales. *Knot Invariants Derived from Yang-Baxter Operators Associated to Algebra Structures.*

We consider the problem of constructing knot invariants from Yang-Baxter operators arising from algebra structures. We first compute the enhancements of these operators. Then, we conclude that Turaev's procedure to construct knot invariants from these enhanced operators, as modified by Murakami, invariably produces the Alexander polynomial of knots. (Received October 05, 2004)