## Facts and Dreams About v-Knots and Etingof-Kazhdan

April-07-11
12:17 PM

| Minutes | Topic |
| :---: | :--- |
| 8 | The Peter Lee setup for R,I, "all interesting graded equations arise in this way". |
| 3 | Example: the pure braid group (mention PvB, too). |
| 3 | Generalized algebraic structures. |
| 1 | Example: quandles. |
| 4 | Example: parenthesized braids and horizontal associators. |
| 6 | Example: KTGs and non-horizontal associators. ("Bracket rise" arises here). |
| 5 | Example: wKO's and the Kashiwara-Vergne equations. |
| 15 | vKO's, bi-algebras, E-K, what would it mean to find an expansion, why I care (stronger <br> invariant, more interesting quotients). |
| 5 | wKO's, uKO's, and Alekseev-Enriquez-Torrosian. |
| 1 | The third page. |
| 51 | Total. |

Abstract. I will describe, to the best of my understanding, the relationship between virtual knots and the Etingof-Kazhdan quantization of Lie bialgebras, and explain why, in my humble opinion, both topologists and algebraists should care. I am not happy yet about the state of my understanding of the subject but I haven't lost hope of achieving happiness, one day.


