

Plan: A complete core dump; I'll just be the editor, controlling the order & rate of flow of information.

---

Topics:

1. The very end (though perhaps at the start): beta calculus.
2.  $u, v, w$  braids and their proj.
3. The Hamburg story.

Perhaps I should just give many of my old talks, though elucidate much more on each one?

---

I'm a nut case. Why start planning before May 1?

---

May 2:

Introductions:

0.  $\mu$ -intro: "it's all about Taylor"
1. The "classical Vassiliev intro".
2. Algebraic knot Theory.
3. Stonehenge.
4. Perturbative CS.
5.  $(uvw) \times (TCLH)$
6. Meta &  $\beta$ .

Make a list of challenges!!

-consider making it a wiki-list.

10:00 - 10:45 Lecture

11:15 - 12:00 Lecture

12:00 - 14:00 Lunch

14:00 - 14:45 Lecture

15:15 - 16:00 Lecture

Consider making it a wClips-style production.

- Appoint a TA for management?

Pasted from <http://gcm.au.dk/events/show/artikel/masterclass-may-2013/>

## Make a conventions cheat-sheet?

By the day:

0. The Kauffman bracket and the Jones polynomial (with computations!), the Alexander polynomial, Khovanov homology.
1. Overall introduction:  $(uvw)_x$ (TCLH). Then the  $u$ -column to low algebra.
2. Micro-introduction: Knot theory as an excuse and it's all about Taylor. Then KZ, Kontsevich, parenthesized tangles, associators.
3. Second introduction: algebraic knot theory. Then KTGs to the pentagon and the hexagon.
4. Third introduction: Stonehenge. Then perturbative Chern-Simons theory.
5. Fourth introduction: Dalvit-new. Then  $w$ -tangles to the Alexander polynomial.
6. Fifth introduction: Dalvit-old and all about  $uvw$ -braids.
7. Sixth introduction: meta and beta. Then the full Vietnam story.
8. Trivalent vertices, Alekseev-Torossian, Kashiwara-Vergne, and Alekseev-Torossian-Enriquez.
9. The  $v$ -story in as much as I understand it. (A talk by Chu?)