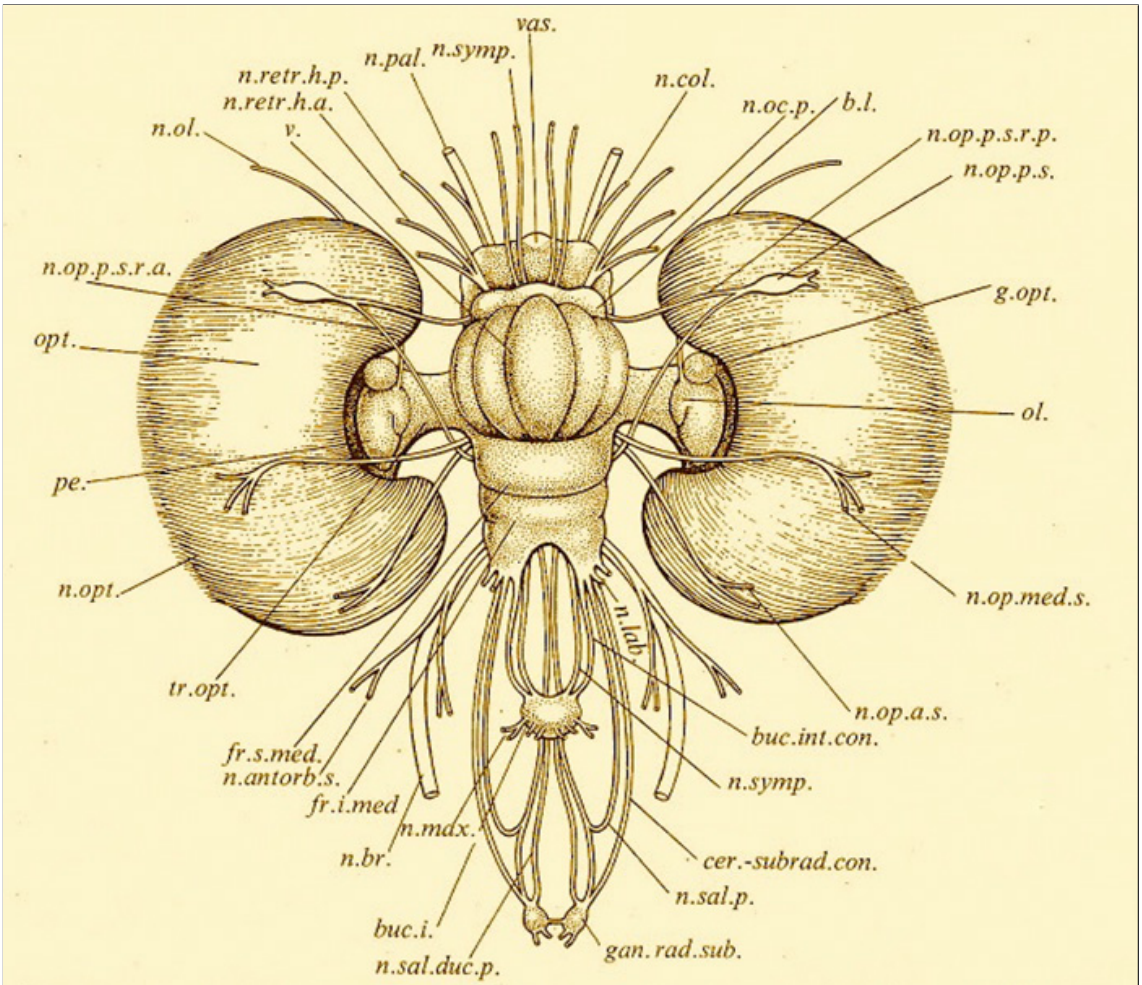

FIG. 1.6. Diagrammatic drawing of central nervous system of *Octopus* as seen from above (modified from Young 1964*b*).

Bodies of Data

Topological Investigations of Movement Dynamics

august 6th through 9th. ***6:00-8:00pm.***

lightbox kulturhaus ***2027 ne. mlk. blvd. portland, or. 97212***

Over four consecutive days of two-hour meetings, this workshop unites practicing research mathematicians with Portland dancers, to collaboratively explore topological data analysis and its interpretations in movement and physical metaphor. Topological data analysis – the study of "the shape of data" – aims to understand data and information from the perspectives of topology – identifying the global, robust, holistic patterns and structure of spaces.

Expect to learn some new mathematics (no prerequisites beyond an open and listening mind). Expect to translate ideas and respond with movement and action, in ordered and disordered activities. Expect meta-discussions centering awareness on interdisciplinary collaborative practice. Expect new metaphors and mysteries: math vs. art; continuous vs. discrete; map vs. territory; signal vs. noise.

Facilitated by Jacob Mooney and Luke Wolcott, a local mathematician with a PhD in algebraic topology, a YouTube channel full of dorky dance videos, and years of experience collaborating with visual and performance artists on math-art work (see forthelukeofmath.com or daikonpickle.com).

The workshop is ungoal-oriented, but the last hour on Saturday night will be opened to the public ($10) for witnessing, followed by music and uniformly convergent instability. Six to nine participants from the Portland movement community are welcome to register for the workshop (free). The six to nine mathematicians will be drawn from the concurrent annual meeting of the Mathematical Association of America, taking place at the Hilton that week.

Contact Luke Wolcott at luke.wolcott@gmail.com if interested or with any questions.