AVERAGING ANALYTIC VARITIES

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Abstract.

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Theorem 2.1. Let $V \subseteq T_N \subseteq X_\Sigma$, be an algebraic subvariety compatible with the toric variety X_Σ. Define

$$\overline{V}_\mu := \int_{x\in(S^1)_N} [\overline{V}] d\mu(x),$$

where μ is a Haar measure on S^1_N. The current $\overline{V}_\mu$ has a continuous superpotential.

Question 2.2.

(a) I am not sure if you wrote down the proof for codimension 1 case at some point.

(b) Do we have any equality of type below, maybe under some homothety? It's

$$\overline{V}_\mu \wedge \overline{V'}_\mu \geq \overline{(V \wedge V')}_\mu$$

(c) A rather unrelated question: What is the speed of convergence for dynamical tropicalisation? How about the slices?

References

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