

Double Induction

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Clarify the status of the double-induction construction of solutions to the KTG/STT equations.

Schema: * Induct upwards on the degree,
* with inner downwards induction on the
number of legs.

Question What exactly is the un-trivalent version of $A(\Gamma)$?

Maybe $\mathcal{D}(H^1(\Gamma))$? Not quite—

claim $\mathcal{G}_{\text{legs}} A(\Gamma) \cong \mathcal{D}(H^1(\Gamma))$, where

$$\mathcal{G}_{\text{legs}} A(\Gamma) := \bigoplus_{l=1}^{\infty} A_{\leq l \text{ legs}}(\Gamma) / A_{\leq l-1 \text{ legs}}(\Gamma)$$