


Challenge: Find a "polynomials on a group" interpretation for "there exists a homomorphic expansion".

Is it true that every polynomial on the diagonal of $G \times G$ extends to a polynomial on $G \times G$?

As phrased, clearly yes.

$$\mathbb{Z}: G \longrightarrow \bigoplus \frac{\mathbb{Z}^n}{\mathbb{Z}^{n+1}} \quad \text{on } \mathbb{R}: \\ x \mapsto \sum \frac{x^n (f(x) - f(x_0))^n}{n!}$$

Why is there a map $F \rightarrow \mathbb{Q}$?

* Because w -knots map into w -knots, so  can be written in terms of the w -generators.

Why is there a map $\mathbb{Q} \rightarrow F$?

* Because E-K / AET say so.

* ?