I believe a better combinatorial and representation-theoretic understanding of the vertices should be possible. In particular, we have the following

Conjecture

For any partitions λ, μ, ν, the vertex is a polynomial in q.

Just one of many natural open questions

Second world of mathematics

outside academia

in industry

→ Mathematics as a technology

Is it pure or applied?

Project VW-foundation in 1992

What are the graduates in Math in Germany intending to do?

Did their dreams come true until today?

3000 graduates, of which

1600 did a diploma or master (not high school teacher)

600 returned questionnaires

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Only 10% work in academia

but 80% work as

software designers, in R&D, in

banks and insurances, in consulting

Do they do Math?

Yes, but one third of them

$\hat{=}$ 25% of all graduates

, Mathematics is the midwife, not

In the second world, as many people do mathematics as in the first world

– but mainly applied math.

They cannot drift apart from pure math, since there is very little [illegible] between the 2 worlds

This is bad:

- For the second world, since it would urgently need good mathematics, which deals with their problems
- For the first world, since „Math as a Technology" offers a great number of challenges, add public prestige, money and attracts students

Both worlds need each other!