

Expressive Means and Mathematical Conceptualization

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Case studies bring out striking contributions
of shifting among expressive strategies
while treating a given topic mathematically.

*Mathematics shapes special-purpose contents, by the expressive means
it deploys (and avoids) in distinctive contexts (**modes**)
especially suited to certain aspects of problems.*

The intellectual power of mathematics resides not only in rigorous proof
but also in coordinating suitable modes to overall purposes.

The first talk will present the general philosophical
picture, with elementary examples. The second talk will
consider mathematically more advanced examples such as
group representation theory and algebraic number theory.