

Inverse Hamiltonian Reduction: A Lightning Intro

Aim: Find categories $\mathcal{C}$ for $2D\ CFT \rightsquigarrow V\text{-Mod.}$

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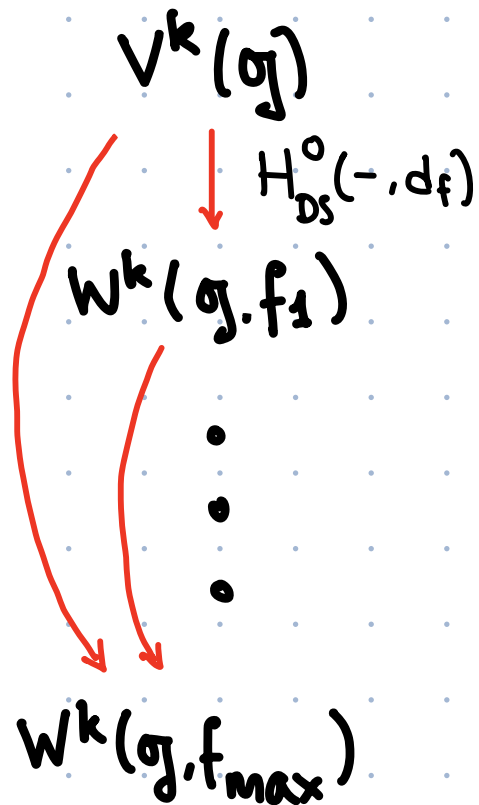
Hard when $\mathcal{C}$ nonfinite nonsemisimple (k "fractional adn")

$$V^k(\mathfrak{g})$$

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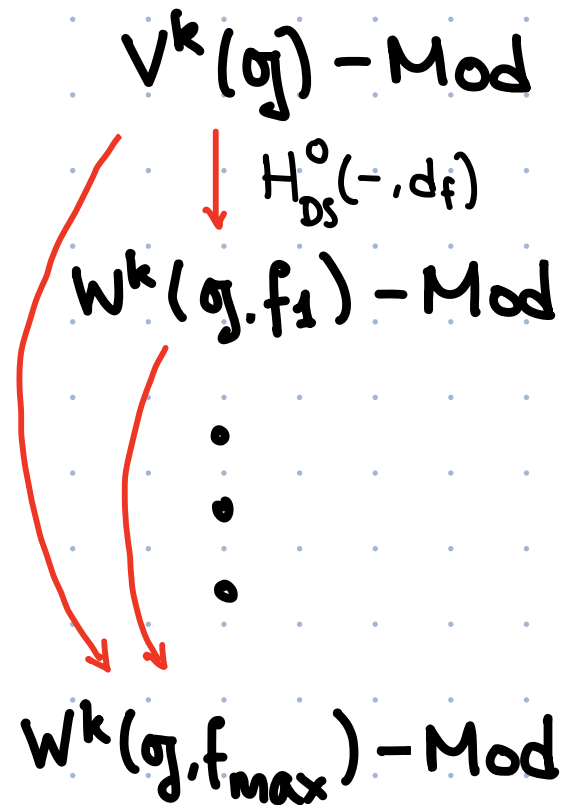
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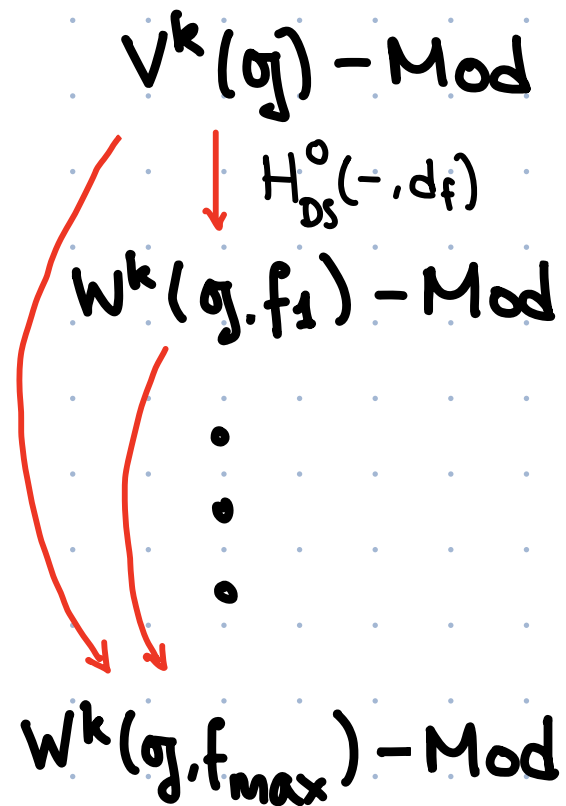
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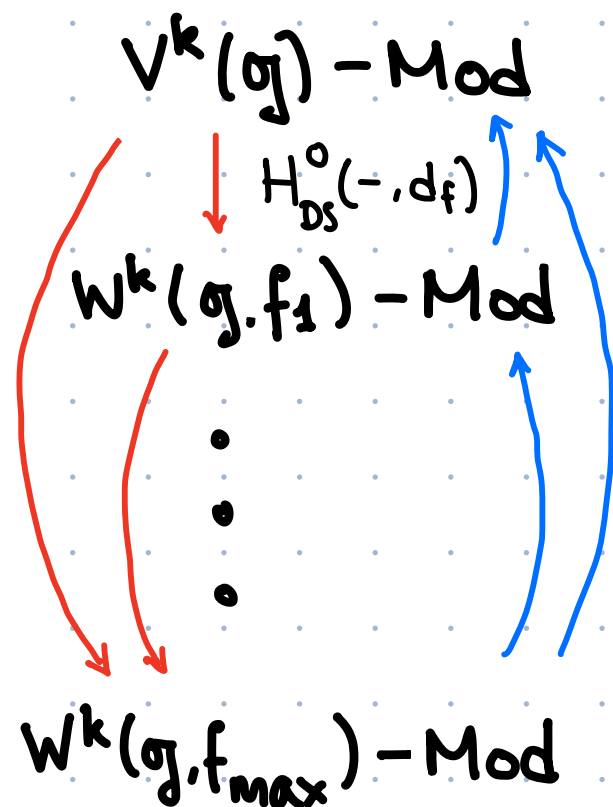


Key point: $W^k(\mathfrak{g}, f_{\max})\text{-Mod}$
is finite and semisimple
[Arakawa]

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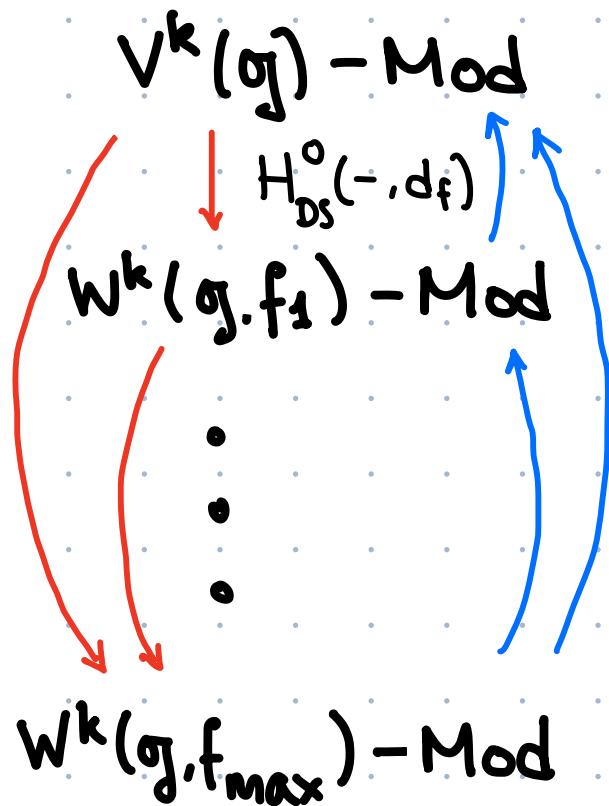
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Lifts to (families of) functors

$W^k(\mathfrak{g}, f_i)\text{-Mod} \longrightarrow V^k(\mathfrak{g})\text{-Mod}$

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- Ind/Res action on Mod Cats? $\rightsquigarrow$ Categorification?