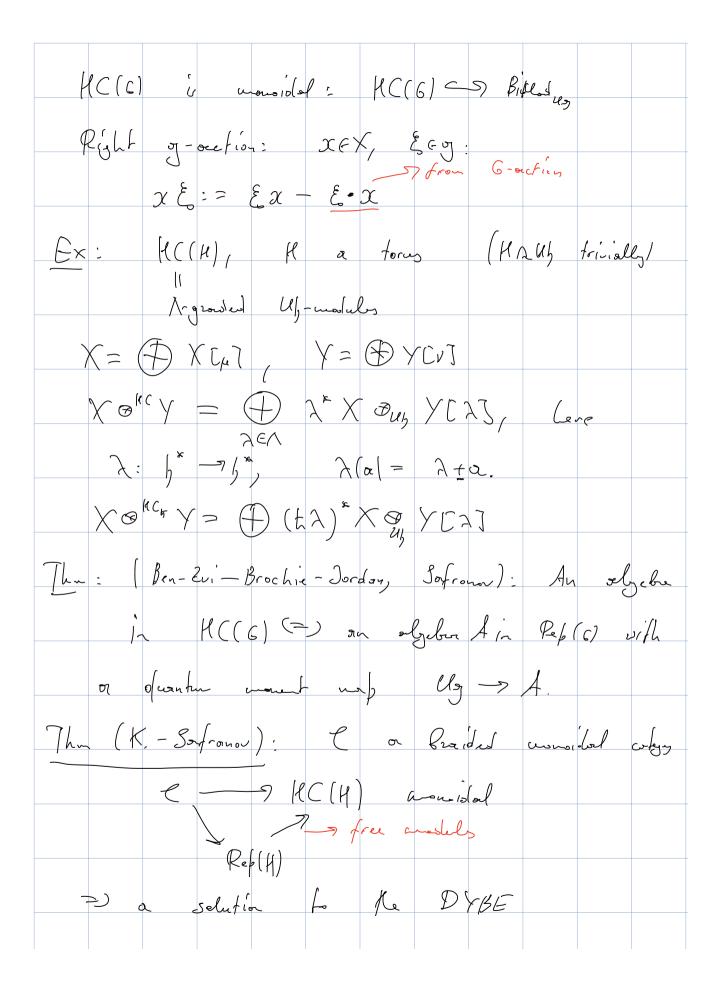
Carrical approach to Synamical YBE · Quantum Young-Baxter eduntion: U, V, W, Ruv: U&V -> U&V Ryu, Ru QYBE: Run Run From = Rom Run Run of Ulor on R_{12} R_{13} R_{23} = R_{23} R_{13} R_{12} Assure C is or braided mousidal cakegary F: C -> Veet. R, YB C Praiding on C Fuonoidal: XX, Y E C $R_{Y,Y}$: $F(X) \otimes F(Y) \xrightarrow{J_{Y,Y}} F(X \otimes Y) \xrightarrow{J_{Y,Y}} F(Y \otimes X) \xrightarrow{S}$ 27, x = (x) @F(x) => 1=(x) @F(x) Sortist de QYBE (= Levouyon axion 3xx) Typically, (= Comod (H = O(6) or Oq (6)) · DQYBE: let H be n torus (K=(C*)^) 6 = Lie (H) Ru (2-h")) Rum (2| Rum (2-L")) =

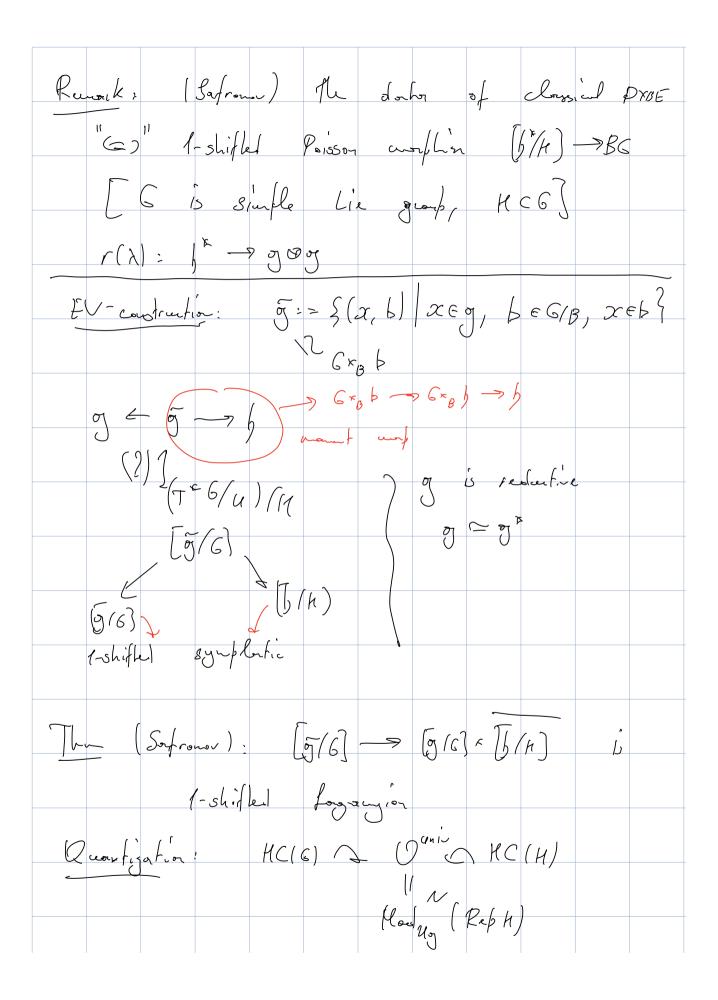
Rue (2) Rue (2-1(2)) Rue (2) lere > € h * U, V, W ∈ Rep (H), Rus h => Ew/(420) neromorphic function, Run is h-inv. Son ue e U: h· u:= 20 + (u) · u · Face - type woods · Exchange objeken in fjourille et Toda fied · Jeller: KZB ed's on elliptic cerrus (in there, he Pico(H)) Semiclosiel version: Tendon solutions: « r(A) = En 18-2

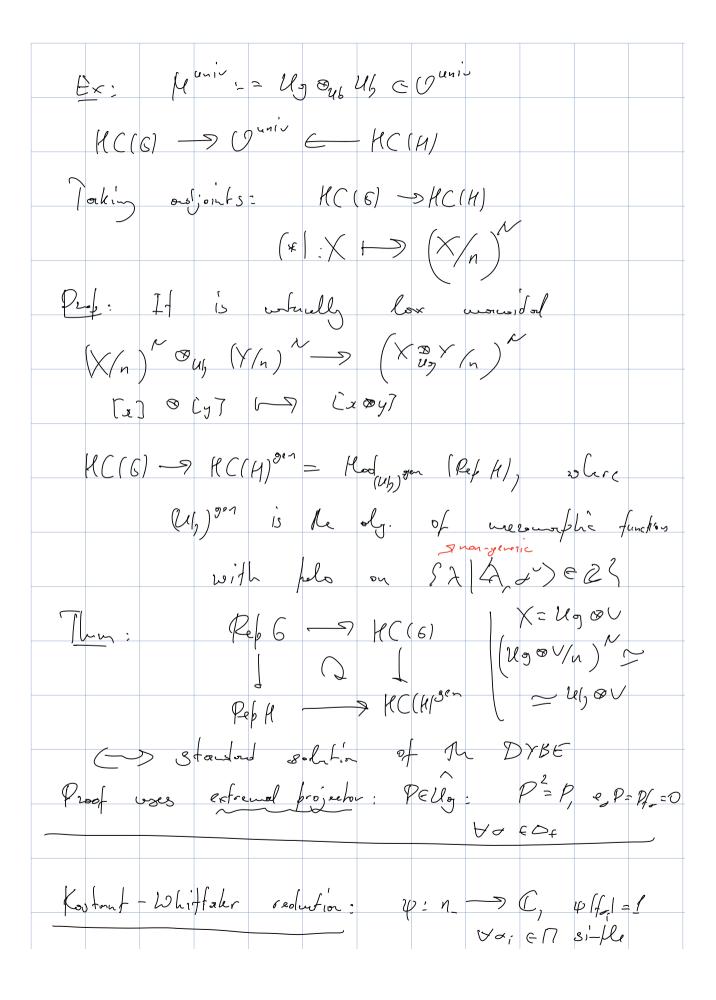
g a simple Lie ob. $r(\lambda l = \frac{\Omega}{2} + \frac{1}{2} + \frac{1}{2} \cosh(\frac{(a,\lambda)}{2}) e_{\lambda} e_{\lambda}$ shipleExamples of solutions to QDXB+ for any of: EV: My = Verma madule of verylt) O: Ma ov, where V firsterdin replayor \$\rightarrow\ \lambda \rightarrow\ \lambda \rightar

 $\phi \longrightarrow \langle \phi \rangle = \langle x_{\mu}, \phi(x_{\lambda}) \rangle_{(x_{\lambda})} \hat{x}_{\lambda} \hat{x}_{\lambda} \hat{x}_{\lambda}$ VCX-4] flow (Mz, My OV) -> VEX-43 Prop; If My is irreducible, An Construction: let V, W be d. - ol. cep's of o, w EV, w ve jolt vectors Assure Zeb* is greec, i.e. (A, 27# Z War = 7 M is inced tree => J Jun (>) (vou) E VOW 3.L. this confusifin 15 /20 (A) (VEW) Jula: Von - Juon Prop (Etimot - Varelinks): Jun (x) is invertible, werourphic, sortistis the objustiful hist ex. C_1 : $(J_{v,v}^{1})^{-1}J_{v,w}=:R_{v,w}(\lambda)$ subject to

What is the interpretation? Harish-Chandre bimolds: let G be an affin oly. 820p, 3 = Cie 161 [576] 1-shifted synthesic Thu (Calaque): 1-shifted Layrongians in [076] 61 (=> Komplanion G-spores If X is a 6-schene (susoth), me X - 7 of is a 6-edenie work ~ [X/G] ~ [g*/6] QCh (5"/6)) = Md. (Rep 6) HC(G)= Mad | Rep G) 2 X (=) (=) · X is a Uz-wodule a X is also a rep of 6 3-f seef: Noy OX -9X of G-representations Ex: fre: Rep C -> MC(C), free(V) = Mg ov







The : (Kooton +):	(n U =) N_	~ Z(Ug)	
	$n^{\psi} = 15$	gin. ly x.	- Wal, xen
HC(6)> Z(L			
Prof: (Beekekovnil			
7(Ug) -> Uh	HC Comos	whish	
Birmed & (Ug)			
T D J			
Thus (Girling)	kan () _ K		
Thum: (6/10 t bury) 3 on wateral X(a)	Lay	for Stz precise +	·
J of cotrical	N Europhin		
	72(UD) Uh		