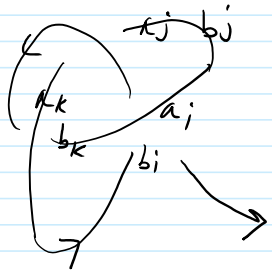
17-1350-AKT Fri Feb 10, Brute Hour 5: Re-Ordering Gaussians in g0

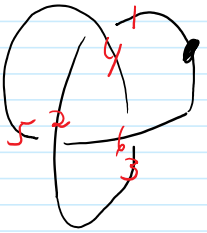
January 19, 2017 2:20 PM



$R=\sum a_i\otimes b_i \in A\otimes A = U(g)\otimes U(g)$

s.t. $R^{12}R^{13}R^{23}=R^{23}R^{13}R^{12}$

$\sum_{i,j,k} b_i a_j b_k a_i b_j a_k \in U(g)$



Today: $g_0=\langle h,e,l,f\rangle / [e,l]=-l \quad [f,l]=f \quad [e,f]=h$ (h central)

$r=h\otimes l + l\otimes f \qquad R=\exp(r)$

Note $U(g_0)^{\otimes S} = U(\oplus_S g_0) = U\left(\langle h_i,e_i,l_i,f_i\rangle / [e_i,e_j]=\delta_{ij}\,e_i \text{ etc.}\right)$ (h_i central)

On to Mathematica at 170210-g0Gaussians.nb