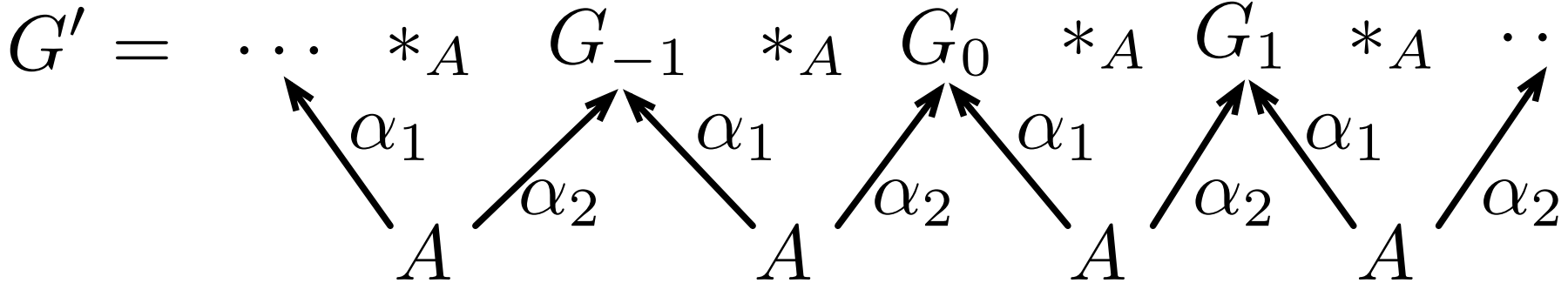
$G' = \cdots *_A G_{-1} *_A G_0 *_A G_1 *_A \cdots$
α_1
α_2
A