

Let $A = GC^-(\mathbf{G}) = \bigoplus_{i=1}^2 F[x_1, x_2]\langle a_i \rangle$, equipped with the differential

$$\begin{aligned}\partial a_1 &= 0 \\ \partial a_2 &= (x_1 + x_2)a_1.\end{aligned}$$

Let $B = GC^-(\mathbf{G}') = \bigoplus_{i=1}^6 F[x_1, x_2, x_3]\langle b_i \rangle$, viewed as an $F[x_1, x_2]$ -module, equipped with the differential

$$\begin{aligned}\partial b_1 &= b_3 + x_3 b_6 \\ \partial b_2 &= (x_1 + x_2)b_1 + (x_2 + x_3)b_4 + (x_1 + x_3)b_5 \\ \partial b_3 &= 0 \\ \partial b_4 &= b_3 + x_1 b_6 \\ \partial b_5 &= b_3 + x_2 b_6 \\ \partial b_6 &= 0.\end{aligned}$$

Define $F[x_1, x_2]$ -module homomorphisms

$$f : A \rightarrow B : \begin{cases} a_1 \mapsto b_6, \\ a_2 \mapsto b_4 + b_5, \end{cases} \quad \text{and} \quad g : B \rightarrow A : \begin{cases} b_1 \mapsto 0, \\ b_2 \mapsto 0, \\ b_3 \mapsto x_1 a_1, \\ b_4 \mapsto 0, \\ b_5 \mapsto a_2, \\ b_6 \mapsto a_1, \\ x_3 \mapsto x_1. \end{cases}$$