$$A \quad \xrightarrow{\quad (v_A = g^{-s_A}) \quad} \quad C \quad \xrightarrow{\quad (v'_A = g^{-s'_A}) \quad} \quad T$$
$$\xleftarrow{\qquad (P_A) \qquad} \qquad \xleftarrow{\qquad (P_A) \qquad}$$