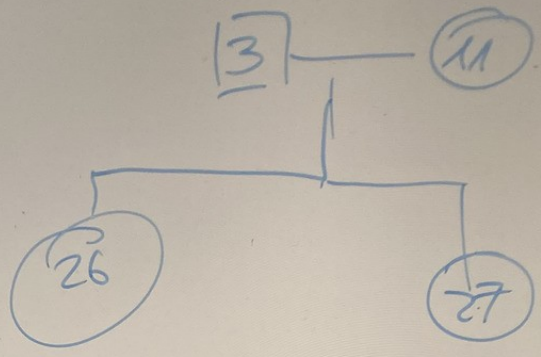
□ $\operatorname{cov}(u_{26}, u_{27})$



$$u_{26} = \tfrac{1}{2} u_3 + \tfrac{1}{2} u_{11} + u_{26}$$

$$u_{27} = \tfrac{1}{2} u_3 + \tfrac{1}{2} u_{11} + u_{27}$$

$$\operatorname{cov}(u_{26}, u_{27}) = \operatorname{cov}\left(\tfrac{1}{2}u_3 + \tfrac{1}{2}u_{11} + u_{26},\ \tfrac{1}{2}u_3 + \tfrac{1}{2}u_{11} + u_{27}\right)$$

$$= \operatorname{cov}\left(\tfrac{1}{2}u_3, \tfrac{1}{2}u_3\right) + \operatorname{cov}\left(\tfrac{1}{2}u_3, \tfrac{1}{2}u_{11}\right) + \operatorname{cov}\left(\tfrac{1}{2}u_3, u_{27}\right)$$
$$+ \operatorname{cov}\left(\tfrac{1}{2}u_{11}, \tfrac{1}{2}u_3\right) + \operatorname{cov}\left(\tfrac{1}{2}u_{11}, \tfrac{1}{2}u_{11}\right) + \operatorname{cov}\left(\tfrac{1}{2}u_{11}, u_{27}\right)$$
$$+ \operatorname{cov}(u_{26}, \ldots) + \ldots + \operatorname{cov}(u_{26}, \ldots)$$

$$= \operatorname{cov}\left(\tfrac{1}{2}u_3, \tfrac{1}{2}u_3\right) + \operatorname{cov}\left(\tfrac{1}{2}u_{11}, \tfrac{1}{2}u_{11}\right)$$
$$= \tfrac{1}{4}\operatorname{cov}(u_3, u_3) + \tfrac{1}{4}\operatorname{cov}(u_{11}, u_{11})$$
$$= \tfrac{1}{4}\sigma_{u_3}^2 + \tfrac{1}{4}\sigma_{u_{11}}^2 = \tfrac{1}{2}\sigma_{u_3}^2$$