

$$(m_u^i)^2 = \left(0, |H_1^u|^2 + |H_2^u|^2 \frac{|\Psi_{42}|^2}{\Lambda^2}, |H_2^u|^2 + |H_3^u|^2 \frac{|\rho_{53}^{(1)}|^2}{\Lambda^2} \right)$$