

$$\hat{\Sigma}_{\chi,t} = \frac{1}{m_t}\left[\begin{array}{cc} \hat{\Sigma}_t & 0 \\ 0 & \frac{\hat{\lambda}_{1,t}\,\hat{\lambda}_{2,t}}{(\hat{\lambda}_{1,t}-\hat{\lambda}_{2,t})^2} \end{array}\right]$$

Thank you

$$\mu(\mathcal{R}; \widetilde{\mathcal{I}}, w) \triangleq \int_{\widetilde{\sigma}^{-1}(\mathcal{R} \cap \widetilde{\mathcal{I}})} w(\widetilde{\sigma}(\alpha)) \, G(\alpha; \widetilde{\sigma}) \, \mathrm{d}\alpha.$$

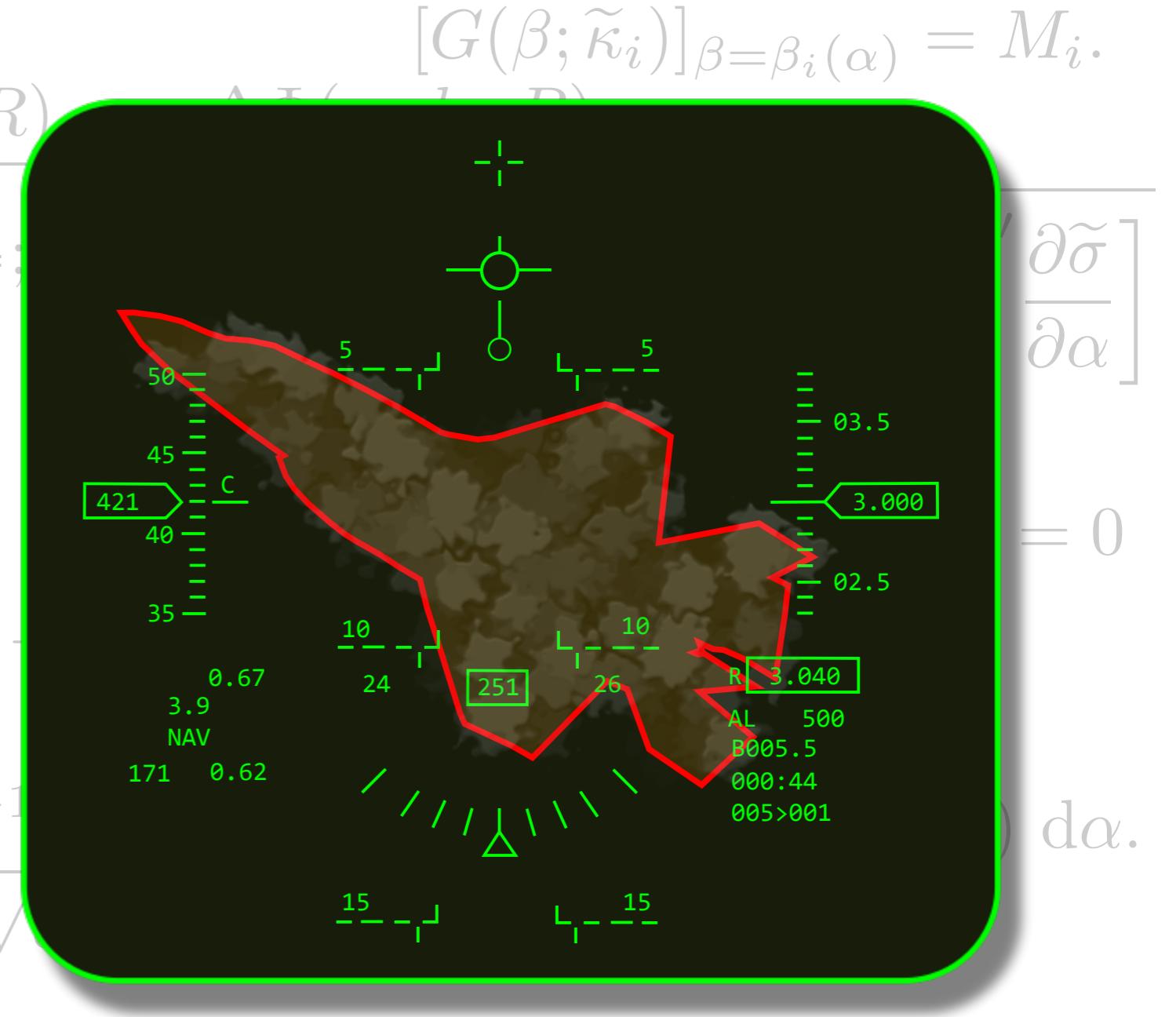
$$\widetilde{\kappa}(\alpha; \widetilde{S}) \triangleq \sum_{i=1}^n 1_{\mathcal{A}_i}(\alpha) \, B(\beta_i(\alpha)) \widetilde{P}_i \quad \mathbb{P}(\mathcal{R}; \widetilde{\mathcal{I}}, w) \triangleq \frac{\mu(\mathcal{R}; \widetilde{\mathcal{I}}, w)}{\mu(\mathbb{R}^2; \mathcal{I}, w)}.$$

$$\left\{ \begin{array}{l} y = p + U(h) \widetilde{\sigma}(\alpha) + v \\ \alpha \sim p_\alpha(\cdot) \\ v \sim p_v(\cdot) \end{array} \right.$$

$$p_\alpha(\alpha) = \frac{w(\widetilde{\sigma}(\alpha)) \, G(\alpha; \widetilde{\sigma})}{\int_{[0,1]^d} w(\widetilde{\sigma}(\beta)) \, G(\beta; \widetilde{\sigma}) \, \mathrm{d}\beta}$$

$$\begin{aligned} x_{t|t} &\triangleq (I - L_t H)x_{t|t-1} + L_k \chi_t \\ P_{t|t} &\triangleq (I - L_t H)P_{t|t-1} \\ L_t &\triangleq P_{t|t-1}H'(HP_{t|t-1}H' + \Sigma_{\chi,t})^{-1} \end{aligned}$$

$$\mathcal{L}\left(\widetilde{y}|\widetilde{S}\right)=\sum_{i=1}^n\frac{M_i}{M}\int_{[0,1]^d}\gamma\left(\widetilde{y},\widetilde{\sigma}(\beta)\right)p_\alpha\left(\beta_i^{-1}(\beta)\right)\,\mathrm{d}\beta$$



$$\widetilde{y}=U(h)'(y-p)$$

matteo.tesori@unifi.it

$$G(\alpha; \widetilde{\sigma}) \triangleq \sqrt{\det \left[\frac{\partial \widetilde{\sigma}'}{\partial \alpha} \frac{\partial \widetilde{\sigma}}{\partial \alpha} \right]}$$