```
\begin{array}{ll} \text{for } n=1 \text{ to } N \text{:} \\ t_n=2^{N\cdot n} \\ \text{choose } \vartheta_n^{\text{ ctrl}} \\ M_n=G+F(n\text{-}1) \end{array}
```

Non-adaptive protocol

 $\theta_{nm} = m\pi/M_{n}$

 $\mu = \text{Ramsey} (\theta = \theta_{n,m}, \tau = t_n \tau_{min})$ $\text{Bayesian_update} (\text{res} = \mu, \theta = \theta_{n,m}, \tau = t_n \tau_{min})$

Limited-adaptive protocol

 $\mu =$ Ramsey $(\vartheta = \vartheta_n^{\text{ctrl}}, \tau = t_n \tau_{\min})$

Bayesian_update(res = μ , $\vartheta = \vartheta_n^{\text{ctrl}}$, $\tau = t_n \tau_{\text{min}}$)

for m=1 to M: