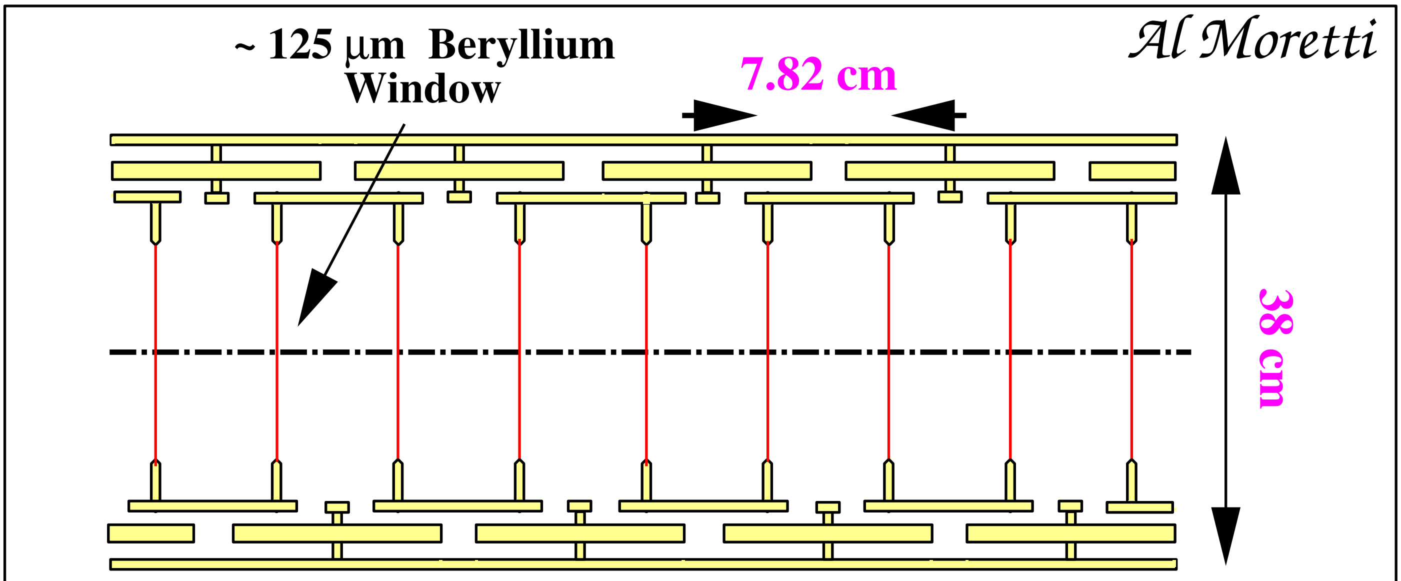
Option 1: Cavities with Beryllium Windows

- **Since muons do not interact strongly, can close the aperture in the rf cavity with a thin conductor ... for a given peak surface field –> ~ doubles the accelerating gradient on axis –> Epeak = Eacc .**



π/2 805 MHz Interleaved Cavity

- **Significant heating of the windows due to rf current –> will have to run the cavities at liquid N_2 temp (better material properties at low temps ... λ,σ,α).**

- **R&D Issues:**
  - **Cavity Q, tunability, coupling characteristics at LN_2 temperatures.**
  - **Be windows: Be properties, mechanical stability.**
  - **Multipactoring**
  - **Maximum accelerating gradient.**