

# Review Question #2

Andrew Lambert

2) Based on the calculations that Andrew showed, what would be the estimated cavity pressure for  $3 \times 10^{-6}$  Torr MICE external vacuum pressure?

For  $5 \times 10^{-6}$  Torr?

- If vessel pressure is  $3 \times 10^{-6}$  torr and bypass line conductance is 30 L/s, the cavity pressure is  $2.0 \times 10^{-7}$  torr.
- If vessel pressure is  $5 \times 10^{-6}$  torr and bypass line conductance is 30 L/s, the cavity pressure is  $3.3 \times 10^{-7}$  torr.
- If vessel pressure is  $3 \times 10^{-6}$  torr and bypass line conductance is 10 L/s, the cavity pressure is  $7.7 \times 10^{-8}$  torr.
- If vessel pressure is  $5 \times 10^{-6}$  torr and bypass line conductance is 10 L/s, the cavity pressure is  $1.2 \times 10^{-7}$  torr. 5 L/s for mid  $10^{-8}$  torr range.