

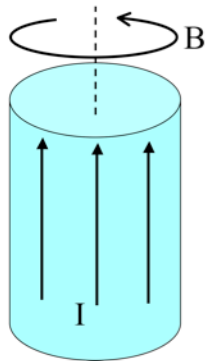
Predict the results of the following experiment: a paramagnetic bar and a diamagnetic bar are pushed inside of a solenoid.

- A. The paramagnet is pushed out, the diamagnet is sucked in
- B. The diamagnet is pushed out, the paramagnet is sucked in
- C. Both are sucked in, but with different force
- D. Both are pushed out, but with different force



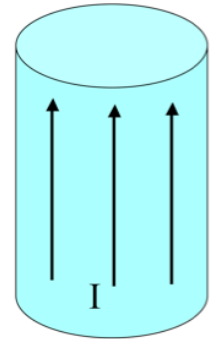
A very long aluminum (paramagnetic!) rod carries a uniformly distributed current I along the $+z$ direction. We know \mathbf{B} will be CCW as viewed from above. (Right?) What about \mathbf{H} and \mathbf{M} inside the cylinder?

- A. Both are CCW
- B. Both are CW
- C. \mathbf{H} is CCW, but \mathbf{M} is CW
- D. \mathbf{H} is CW, \mathbf{M} is CCW
- E. ???



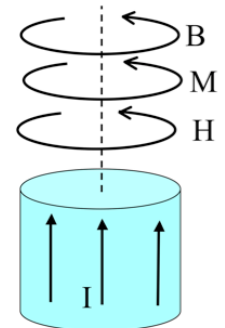
A very long aluminum (paramagnetic!) rod carries a uniformly distributed current I along the $+z$ direction. What is the direction of the bound volume current?

- A. \mathbf{J}_B points parallel to I
- B. \mathbf{J}_B points anti-parallel to I
- C. It's zero!
- D. Other/not sure



A very long aluminum (paramagnetic!) rod carries a uniformly distributed current I along the $+z$ direction. What is the direction of the bound volume current?

- A. \mathbf{J}_B points parallel to I
- B. \mathbf{J}_B points anti-parallel to I
- C. It's zero!
- D. Other/not sure





A very long aluminum (paramagnetic!) rod carries a uniformly distributed current I along the $+z$ direction. What is the direction of the bound surface current?

- A. \mathbf{K}_B points parallel to I
- B. \mathbf{K}_B points anti-parallel to I
- C. Other/not sure

