

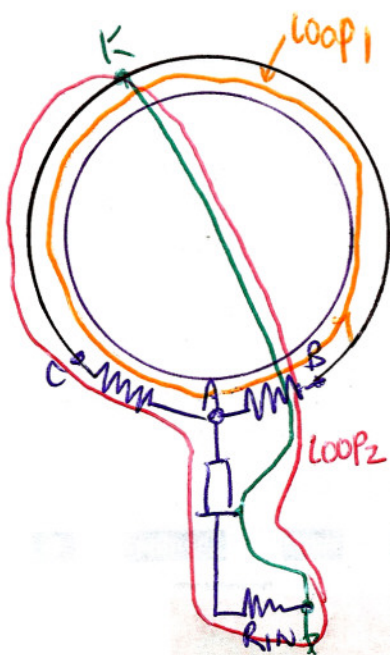
LOOP2 \Rightarrow LOOP A'KPCA IS SAME LOOP AS
 LOOP1 \times BKDCA

VOLTAGE INDUCED ONTO BOTH ARE
 EXACTLY THE SAME.

ASSUME LENGTH OF RESISTOR IS SHORT
 COMPARE TO THE LENGTH OF WIRE OF
 LOOP1. ALSO ASSUME INDUCED EMF = 1V
 THEREFORE $I = 1mA$

THE SCOPE MEASURE 0.4V DUE TO
 EMF ON LOOP2 (1V) - 0.1V DROP ON R_2
 NOT ACTUALLY VOLTAGE DROP ON R_2
 IT JUST HAPPENED TWO VOLTAGE ARE

THE SAME, THIS IS TRUE EVEN IF YOU MOVE POINT K TO ANY POINT
 OF THE WIRE BC.



THIS CAN BE VERIFY BY MOVING THE
 PROBE GROUND TO THE TOP OF THE COIL.
 NOW THE LOOP2 CANNOT CIRCLE ALL THE
 FLUX (MORE LIKE HALF) OF THE FLUX
 YOU WILL SEE VOLTAGE DROP AS
 I OBSERVED IN MY ORIGINAL WRITEUP

AND IF YOU MOVE THE GROUND LEAD ALL
 THE WAY TO THE LEFT, YOU SEE ONLY
 0.1V AND OPPOSITE POLARITY BECAUSE
 THE SCOPE PROBE IS NOT CIRCULATING ANY
 FLUX.

SO: THE QUESTION IS IS THIS PATH DEPENDENT OR
 IS IT FLUX CIRCULATING DEPENDENT?