











Given that the arm length with our laboratory setup is  $l_0 = 10$  cm for a measuring distance  $\Delta l = \lambda/2$  (e.g. the resolution of any interferometer) we get a strain  $\varepsilon \cong 3 \times 10^{-6}$ . With a 50 m arm length the relative strain, for the same measuring conditions, would be  $\varepsilon \cong 6 \times 10^{-9}$ . For the strainmeter with  $\lambda/8$  resolution, that we have built, the strain for  $l_0 = 10$  cm is  $\varepsilon \cong 8 \times 10^{-7}$  and for a real size device with  $l_0 = 50$  m (that we intend to built in an existing tunnel in the Carpathian Mountains), it would be  $\varepsilon \cong 10^{-9}$ . This value is more than enough to resolve any earth strain.

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