Olivier Oloa* (olivier.oloa@wanadoo.fr), 38 chemin Orme Aigu, 78660 Ablis, France. New formulas for Euler log-trigonometric integrals. Preliminary report.

We establish a formula for

$$\int_0^{\pi/2} \theta^n \ln^p (2\cos\theta) \,\mathrm{d}\theta,$$

where n is a positive even integer, p being any positive integer. We use Mathematica to guess a formula in the case of n being odd. (Received September 15, 2008)