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

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

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)