

**ABOUT THE DEGREE OF POLARIZATION OF
THE PRIMARY RAINBOW GENERATED BY ARTIFICIAL LIGHT**

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(Received 28 September 2006; accepted 02 November 2006)

Abstract: *In the framework of Nussenzveig-Khare (NK) theory of the rainbow, we determine the Stokes parameters for the „out light” (rainbow), when the „incident light” on a spherical droplet is arbitrary polarized. We assume water droplets with the radius a and the refractive index $N=4/3$, considering $\beta = 2\pi(a/\lambda)$ as a parameter (comprised between 50 and $+\infty$), with many values less than the so called „Airy’s limit” $\beta = 5000$.*