

## SUM RULES FOR PHOTOPRODUCTION PROCESSES

*E. Bartoš<sup>1,2</sup>, E. A. Kuraev<sup>2</sup>, S. Dubnička<sup>3</sup>*

<sup>1</sup>Department of Theoretical Physics,  
Comenius University  
(84248 Bratislava, Slovakia),

<sup>2</sup>Joint Institute for Nuclear Research  
(141980 Dubna, Russia),

<sup>3</sup>Institute of Physics, Slovak Acad. Sci.  
(Bratislava, Slovakia)

### S u m m a r y

Utilizing the analytic properties of a heavy photon forward Compton scattering amplitude, we derive a sum rule which connects the hadron electromagnetic formfactors with the differential cross section of the electroproduction process on a hadron. For the case of small transferred momenta, it can be expressed as a relation of the radius and eventually the electromagnetic moment with the integral over the total hadron photoproduction cross section.