

---

**EMILY REDELMEIER**, ISARA Corporation

*Cumulants in the finite-matrix and higher-order free cases*

I will discuss an extension of the matrix cumulants first defined by Capitaine and Casalis which follows naturally from their interpretation in connection with diagrammatic methods for computing matrix integrals. The asymptotics of these quantities are the higher-order free cumulants. I will focus on the real and quaternionic cases.