

1

## CHAPTER 1

**Cambell Baker Hausdorf** Für alle  $t \in \mathbb{R}$

$$\exp(tA) \exp(tB) = \exp \left( tA + tB + \frac{t^2}{2} [A, B] + \frac{t^3}{12} [A, [A, B]] + \frac{t^3}{12} [B, [B, A]] + \mathcal{O}(t^4) \right)$$