MEM is applied to QCD sum rules

QCD sum rules

information about $\rho(s)$

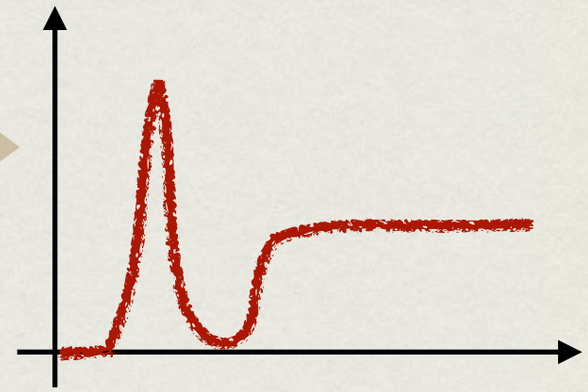
$$G(M^2) = \int_0^\infty K(M^2; s)\rho(s)ds$$

MEM

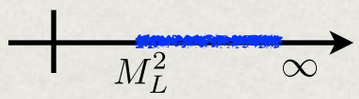
Method to determine SPF from inputed information

Spectral function

$\rho(s)$



where parameter M^2 is effective only on the line



successful to predict mass of ground state

New sum rules are constructed

$$\tilde{G}(\mathcal{M}^2) = \int_0^\infty \tilde{K}(\mathcal{M}^2, s)\rho(s)ds$$

$\mathcal{M}^2$: complex parameter

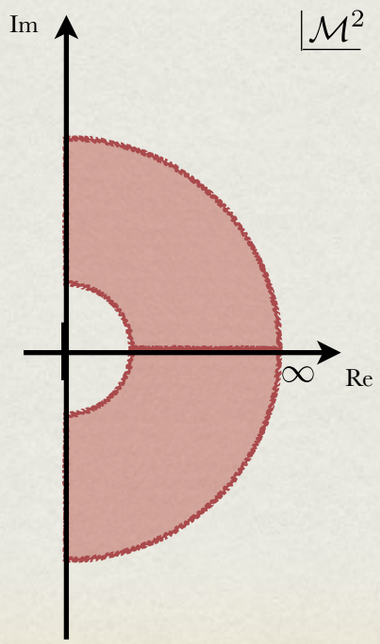
New sum rules with MEM

New sum rules

information about $\rho(s)$

$$\tilde{G}(\mathcal{M}^2) = \int_0^\infty \tilde{K}(\mathcal{M}^2, s)\rho(s)ds$$

where complex parameter
is available on the complex plane



MEM

Method to determine SPF
from inputed information

Spectral function

$\rho(s)$

Larger volume of information is inputted