

The Bochner periodic relations describe behaviour of the Fourier transform on isotypic components of the action of the special orthogonal Lie group  $SO_m$  on the Schwartz space. Fourier transform can be expressed as a suitable element of the double cover  $\widetilde{SL}_2$  of special Lie group  $SL_2$ . That is possible due to the Howe duality describing the decomposition of Schwartz space to  $\widetilde{SL}_2 \times SO_m$ -invariant isotypic components.