A polynomial $P \in C[z_1, . . . , z_d]$ is strongly D^d-stable if P has no zeroes in the d-dimensional closed unit polydisc D^d. For such a polynomial, its spectral density function is defined to be $1/[P(z)P(1/z^*)^*]$. Meanwhile, an abelian square is a finite string of the form ww' where w' is a rearrangement of w. I will discuss ongoing work (joint with Chung Wong) on a polynomial-valued operator whose spectral density function's Fourier coefficients are all generating functions for combinatorial classes that can be thought of as generalizations of the abelian square concept.