<u>The UV SSI of the Sun Compared to Cooler Stars, Similarities and Differences</u> <u>Juan Fontenla [johnf@digidyna.com]</u>, NorthWest Research Associates, Boulder, Colorado.

This talk will comparatively describe the spectral and stellar atmospheric features that make the UV (near-UV through XUV) spectra of the solar type and cooler stars. Many qualitative similarities are found in these comparisons, as some parallel between the atmospheres occur, but critical quantitative differences exist. For instance, cooler stars atmospheres have some resemblance to sunspots in terms of their photospheric temperature, but a critical issue is that sunspots are surrounded by very bright plage and are subject to a strong incident UV radiation and this does not occur in cool stars. Many questions remain, e.g. which turbulent magnetic fields occur at the surface of cool stars, and some answers can be found from their UV spectra and observed chromospheric and coronal heating. These are some of the topics this talk will touch in presenting the current state of knowledge.