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Concurrent compression of phospholipid membranes by calcium and cholesterol

3 pages, 4 figures, 0 tables
Figure S1. Radial distribution function (RDF) between lipid sn-2 (A) or sn-1 (B) carbonyl (C=O) groups in either POPC/POPS (yellow) or POPC/POPS/20 mol% chol (red) bilayers. System without ions (dotted lines) and immersed in CaCl$_2$ (solid lines) are compared.

Figure S2. Headgroup tilt angle (PN-angle) distribution with respect to the bilayer normal in POPS/POPS membranes without cholesterol and with 20 mol% of cholesterol for (A) PC headgroups (A), and PS headgroups (B).

Figure S3. Radial distribution function (RDF) between hydrogen atom in cholesterol hydroxyl group and sn-1 or sn-2 C=O groups of phospholipids (yellow and red lines, respectively).
Figure S4. Examples of fluorescence emission spectra of Laurdan embedded in POPC/POPS liposomes without (yellow lines) and with 10 or 20 mol% cholesterol (orange and red lines, respectively) at 37 °C, and in plasma membranes isolated from HEK293 cells (black lines) at 40 °C in the absence (dashed lines) or presence (solid lines) of CaCl₂. 440 and 490 nm peaks characteristic for the emission from the solid and liquid disordered phases, respectively, marked by vertical dotted lines.