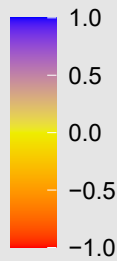


Pearson Correlation Plot for Lake Cadagno Microbial loop dataset

A: Abundance
 FCS: Flow-cytometry
 P:CTD based Physicochemical parameters
 D: Diversity
 N: Nutrients



	A_Chloroplast_ge	A_Chromatium_ge	A_FCS_Phycobilins	A_FCS_Total_cells	A_FCS_VLPs	A_Lentimicrobiaceae_ge	D_16S_alpha_Shannon	D_16S_beta_Axis.1	D_16S_beta_Axis.2	D_FCS_alpha_cells	D_FCS_beta_Axis1_cells	D_FCS_beta_Axis2_cells	Depth_m	N_DOC	N_NH4	N_POC	N_PON	N_POS	N_SO4	Mean Day 1, 2	P_Chl	P_Cond	P_Oxygen	P_PAR_29_Aug	P_Phycocyanin_29_Aug	P_Temp	P_Turb	Secondary_production
A_Chloroplast_ge	1.00 (0.00e+00)	0.13 (7.30e-01)	0.16 (6.50e-01)	0.08 (8.33e-01)	0.51 (1.34e-01)	0.49 (1.55e-01)	0.60 (6.65e-02)	0.64 (4.75e-02)	0.13 (7.17e-01)	0.51 (1.36e-01)	-0.57 (8.49e-02)	0.03 (9.36e-01)	0.63 (4.95e-02)	0.09 (8.02e-01)	0.45 (1.97e-01)	0.07 (8.54e-01)	0.10 (7.77e-01)	0.26 (4.70e-01)	0.28 (4.36e-01)	0.50 (1.37e-01)	0.69 (2.77e-02)	-0.69 (2.74e-02)	-0.61 (6.02e-02)	0.23 (5.15e-01)	-0.69 (2.77e-02)	0.15 (6.75e-01)	0.46 (1.80e-01)	
A_Chromatium_ge	0.13 (7.30e-01)	1.00 (0.00e+00)	0.95 (2.01e-05)	0.99 (8.66e-09)	0.32 (3.67e-01)	0.87 (1.16e-03)	0.27 (4.46e-01)	0.80 (5.81e-03)	-0.10 (7.92e-01)	0.68 (3.02e-02)	-0.79 (6.26e-03)	0.26 (4.67e-01)	0.69 (2.83e-02)	-0.05 (8.97e-01)	0.30 (3.95e-01)	0.92 (1.31e-04)	0.93 (1.05e-04)	0.76 (1.06e-02)	0.60 (6.46e-02)	0.76 (1.04e-02)	0.63 (5.27e-02)	-0.69 (2.83e-02)	-0.63 (5.27e-02)	0.96 (1.09e-05)	-0.71 (2.24e-02)	0.93 (7.25e-05)	0.66 (3.84e-02)	
A_FCS_Phycobilins	0.16 (6.50e-01)	0.95 (2.01e-05)	1.00 (0.00e+00)	0.95 (2.89e-05)	0.34 (3.41e-01)	0.93 (1.21e-04)	0.43 (2.14e-01)	0.85 (1.80e-03)	-0.12 (7.46e-01)	0.72 (1.83e-02)	-0.85 (1.87e-03)	0.30 (4.03e-01)	0.77 (9.57e-03)	0.03 (9.26e-01)	0.47 (1.68e-01)	0.78 (8.15e-03)	0.79 (7.13e-03)	0.90 (4.65e-04)	0.62 (5.46e-02)	0.75 (1.20e-02)	0.66 (3.93e-02)	-0.73 (1.71e-02)	-0.68 (3.19e-02)	0.95 (1.79e-05)	-0.75 (1.33e-02)	0.96 (1.00e-05)	0.69 (2.62e-02)	
A_FCS_Total_cells	0.08 (8.33e-01)	0.99 (8.66e-09)	0.95 (2.89e-05)	1.00 (0.00e+00)	0.33 (3.56e-01)	0.85 (1.82e-03)	0.21 (5.63e-01)	0.77 (8.96e-03)	-0.04 (9.02e-01)	0.63 (5.02e-02)	-0.75 (1.22e-02)	0.30 (3.99e-01)	0.65 (4.12e-02)	-0.09 (7.99e-01)	0.24 (4.96e-01)	0.92 (1.45e-04)	0.93 (1.24e-04)	0.76 (1.08e-02)	0.62 (5.59e-02)	0.76 (1.09e-02)	0.59 (7.20e-02)	-0.66 (3.95e-02)	-0.60 (6.39e-02)	0.96 (8.33e-06)	-0.68 (3.15e-02)	0.95 (3.30e-05)	0.65 (4.23e-02)	
A_FCS_VLPs	0.51 (1.34e-01)	0.32 (3.67e-01)	0.34 (3.41e-01)	0.33 (3.56e-01)	1.00 (0.00e+00)	0.45 (1.94e-01)	0.07 (8.37e-01)	0.55 (9.94e-02)	0.76 (1.15e-02)	0.61 (6.21e-02)	-0.58 (8.19e-02)	-0.08 (8.29e-01)	0.73 (1.63e-02)	0.28 (4.26e-01)	0.24 (5.05e-01)	0.29 (4.17e-01)	0.31 (3.85e-01)	0.37 (2.99e-01)	0.31 (3.78e-01)	0.69 (2.65e-02)	0.81 (4.52e-03)	-0.78 (7.97e-03)	-0.87 (9.98e-04)	0.46 (1.86e-01)	-0.76 (1.04e-02)	0.38 (2.83e-01)	0.63 (4.87e-02)	
A_Lentimicrobiaceae_ge	0.49 (1.55e-01)	0.87 (1.16e-03)	0.93 (1.21e-04)	0.85 (1.82e-03)	0.45 (1.94e-01)	1.00 (0.00e+00)	0.63 (5.17e-02)	0.98 (8.02e-07)	-0.10 (7.88e-01)	0.79 (6.32e-03)	-0.94 (5.04e-05)	0.33 (3.47e-01)	0.88 (7.88e-04)	0.02 (9.58e-01)	0.57 (8.58e-02)	0.68 (2.96e-02)	0.70 (2.30e-02)	0.87 (1.06e-03)	0.62 (5.46e-02)	0.85 (1.88e-03)	0.80 (5.47e-03)	-0.87 (1.10e-03)	-0.78 (7.33e-03)	0.91 (2.37e-04)	-0.88 (6.69e-04)	0.91 (2.28e-04)	0.80 (5.09e-03)	
D_16S_alpha_Shannon	0.60 (6.65e-02)	0.27 (4.46e-01)	0.43 (2.14e-01)	0.21 (5.63e-01)	0.07 (8.37e-01)	0.63 (5.17e-02)	1.00 (0.00e+00)	0.65 (4.33e-02)	-0.51 (1.31e-01)	0.62 (5.74e-02)	-0.66 (3.87e-02)	-0.04 (9.19e-01)	0.59 (7.17e-02)	0.20 (5.77e-01)	0.74 (1.36e-02)	0.00 (9.92e-01)	0.03 (9.27e-01)	0.51 (1.33e-01)	0.25 (4.89e-01)	0.40 (2.46e-01)	0.54 (1.06e-01)	-0.56 (8.94e-02)	-0.42 (2.28e-01)	0.35 (3.17e-01)	-0.57 (8.51e-02)	0.39 (2.62e-01)	0.49 (1.47e-01)	
D_16S_beta_Axis.1	0.64 (4.75e-02)	0.80 (5.81e-03)	0.85 (1.80e-03)	0.77 (8.96e-03)	0.55 (9.94e-02)	0.98 (8.02e-07)	0.65 (4.33e-02)	1.00 (0.00e+00)	0.00 (1.00e+00)	0.81 (4.41e-03)	-0.95 (1.98e-05)	0.30 (3.96e-01)	0.93 (8.91e-05)	0.04 (9.03e-01)	0.61 (6.00e-02)	0.63 (5.33e-02)	0.65 (4.15e-02)	0.83 (2.79e-02)	0.58 (7.94e-02)	0.85 (1.64e-03)	0.87 (1.16e-03)	-0.93 (1.16e-04)	-0.85 (2.01e-03)	0.85 (1.76e-03)	-0.94 (5.38e-05)	0.83 (3.06e-03)	0.80 (5.64e-03)	
D_16S_beta_Axis.2	0.13 (7.17e-01)	-0.10 (7.92e-01)	-0.12 (7.46e-01)	-0.04 (9.02e-01)	0.76 (1.15e-02)	-0.10 (7.88e-01)	-0.51 (1.31e-01)	0.00 (1.00e+00)	1.00 (0.00e+00)	-0.03 (9.29e-01)	0.03 (9.26e-01)	0.06 (8.76e-01)	0.20 (5.73e-01)	0.01 (9.76e-01)	-0.17 (6.46e-01)	-0.01 (9.81e-01)	-0.01 (9.83e-01)	-0.02 (9.54e-01)	-0.04 (9.06e-01)	0.18 (6.15e-01)	0.25 (4.85e-01)	-0.22 (5.41e-01)	-0.39 (2.60e-01)	-0.01 (9.73e-01)	-0.21 (5.63e-01)	-0.08 (8.31e-01)	0.09 (8.15e-01)	
D_FCS_alpha_cells	0.51 (1.36e-01)	0.68 (3.02e-02)	0.72 (1.83e-02)	0.63 (5.02e-02)	0.61 (6.21e-02)	0.79 (6.32e-03)	0.62 (5.74e-02)	0.81 (4.41e-03)	-0.03 (9.29e-01)	1.00 (0.00e+00)	-0.93 (1.04e-04)	-0.21 (5.59e-01)	0.86 (1.55e-03)	0.54 (1.09e-01)	0.49 (1.48e-01)	0.56 (9.47e-02)	0.58 (7.96e-02)	0.61 (6.26e-02)	0.64 (4.81e-02)	0.84 (2.40e-03)	0.91 (2.20e-04)	-0.90 (3.22e-04)	-0.87 (1.10e-03)	0.77 (9.13e-03)	-0.89 (6.13e-04)	0.71 (2.22e-02)	0.87 (1.21e-03)	
D_FCS_beta_Axis1_cells	-0.57 (8.49e-02)	-0.79 (6.26e-03)	-0.85 (1.87e-03)	-0.75 (1.22e-02)	-0.58 (8.19e-02)	-0.94 (5.04e-05)	-0.66 (3.87e-02)	-0.95 (1.98e-05)	0.03 (9.26e-01)	-0.93 (1.04e-04)	1.00 (0.00e+00)	-0.12 (7.32e-01)	-0.95 (3.23e-05)	-0.30 (4.05e-01)	-0.59 (7.04e-02)	-0.63 (4.95e-02)	-0.66 (3.92e-02)	-0.77 (8.85e-03)	-0.62 (5.62e-02)	-0.88 (8.73e-04)	-0.91 (2.11e-04)	0.95 (2.90e-05)	0.90 (4.40e-04)	-0.85 (1.62e-03)	0.95 (3.26e-05)	-0.82 (3.97e-03)	-0.87 (1.06e-03)	
D_FCS_beta_Axis2_cells	0.03 (9.36e-01)	0.26 (4.67e-01)	0.30 (4.03e-01)	0.30 (3.99e-01)	-0.08 (8.29e-01)	0.33 (3.47e-01)	-0.04 (9.19e-01)	0.30 (3.96e-01)	0.06 (8.76e-01)	-0.21 (5.59e-01)	-0.12 (7.32e-01)	1.00 (0.00e+00)	0.16 (6.68e-01)	-0.46 (1.76e-01)	0.16 (6.68e-01)	0.20 (5.77e-01)	0.20 (5.77e-01)	0.43 (2.20e-01)	0.03 (9.34e-01)	0.06 (8.76e-01)	0.06 (7.93e-01)	-0.10 (9.19e-01)	-0.04 (9.27e-01)	-0.03 (6.13e-01)	0.18 (8.75e-01)	-0.06 (4.77e-01)	0.25 (9.26e-01)	0.03 (9.26e-01)
Depth_m	0.63 (4.95e-02)	0.69 (2.83e-02)	0.77 (9.57e-03)	0.65 (4.12e-02)	0.73 (1.63e-02)	0.88 (7.88e-04)	0.59 (7.17e-02)	0.93 (8.91e-05)	0.20 (5.73e-01)	0.86 (1.55e-03)	-0.95 (3.23e-05)	0.16 (6.68e-01)	1.00 (0.00e+00)	0.23 (5.15e-01)	0.70 (2.54e-02)	0.50 (1.42e-01)	0.52 (1.21e-01)	0.80 (5.83e-03)	0.45 (1.97e-01)	0.81 (4.52e-03)	0.94 (7.13e-05)	-0.96 (6.91e-06)	-0.95 (2.90e-05)	0.75 (1.17e-02)	-0.97 (5.25e-06)	0.71 (2.09e-02)	0.77 (8.52e-03)	
N_DOC	0.09 (8.02e-01)	-0.05 (8.97e-01)	0.03 (9.26e-01)	-0.09 (7.99e-01)	0.28 (4.26e-01)	0.02 (9.58e-01)	0.20 (5.77e-01)	0.04 (9.03e-01)	0.01 (9.76e-01)	0.54 (1.09e-01)	-0.30 (4.05e-01)	-0.46 (1.76e-01)	0.23 (5.15e-01)	1.00 (0.00e+00)	0.10 (7.77e-01)	-0.06 (8.63e-01)	-0.06 (8.73e-01)	-0.01 (9.87e-01)	0.34 (3.35e-01)	0.18 (6.20e-01)	0.32 (3.73e-01)	-0.26 (4.65e-01)	-0.36 (3.14e-01)	0.04 (9.04e-01)	-0.20 (5.82e-01)	-0.02 (9.48e-01)	0.37 (2.90e-01)	
N_NH4	0.45 (1.97e-01)	0.30 (3.95e-01)	0.47 (1.68e-01)	0.24 (4.96e-01)	0.24 (5.05e-01)	0.57 (8.58e-02)	0.74 (1.36e-02)	0.61 (6.00e-02)	-0.17 (6.46e-01)	0.49 (1.48e-01)	-0.59 (7.04e-02)	0.16 (6.68e-01)	0.70 (2.54e-02)	0.10 (7.77e-01)	1.00 (0.00e+00)	-0.02 (9.60e-01)	-0.00 (9.97e-01)	0.72 (1.89e-02)	-0.11 (6.68e-01)	0.21 (5.69e-01)	0.49 (1.54e-01)	-0.53 (1.16e-01)	-0.47 (1.73e-01)	0.28 (4.30e-01)	-0.54 (1.03e-01)	0.31 (3.85e-01)	0.23 (5.28e-01)	
N_POC	0.07 (8.54e-01)	0.92 (1.31e-04)	0.78 (8.15e-03)	0.92 (1.45e-04)	0.29 (4.17e-01)	0.68 (2.96e-02)	0.00 (9.92e-01)	0.63 (5.33e-02)	-0.01 (9.81e-01)	0.56 (9.47e-02)	-0.63 (4.95e-02)	0.20 (5.77e-01)	0.50 (1.42e-01)	-0.06 (8.63e-01)	-0.02 (9.60e-01)	1.00 (0.00e+00)	1.00 (2.12e-12)	0.49 (1.54e-01)	0.61 (6.11e-02)	0.71 (2.06e-02)	0.52 (1.24e-01)	-0.56 (9.19e-02)	-0.52 (1.25e-01)	0.86 (1.36e-03)	-0.57 (8.34e-02)	0.79 (6.10e-03)	0.58 (7.68e-02)	
N_PON	0.10 (7.77e-01)	0.93 (1.05e-04)	0.79 (7.13e-03)	0.93 (1.24e-04)	0.31 (3.85e-01)	0.70 (2.30e-02)	0.03 (9.27e-01)	0.65 (4.15e-02)	-0.01 (9.83e-01)	0.58 (7.96e-02)	-0.66 (3.92e-02)	0.20 (5.77e-01)	0.52 (1.21e-01)	-0.06 (8.73e-01)	-0.00 (9.97e-01)	1.00 (2.12e-12)	1.00 (0.00e+00)	0.50 (1.44e-01)	0.62 (5.37e-02)	0.74 (1.50e-02)	0.55 (1.02e-01)	-0.59 (7.36e-02)	-0.54 (1.05e-01)	0.87 (9.73e-04)	-0.60 (6.64e-02)	0.81 (4.95e-03)	0.61 (6.18e-02)	
N_POS	0.26 (4.70e-01)	0.76 (1.06e-02)	0.90 (4.65e-04)	0.76 (1.08e-02)	0.37 (2.99e-01)	0.87 (1.06e-03)	0.51 (1.33e-01)	0.83 (2.79e-03)	-0.02 (9.54e-01)	0.61 (6.26e-02)	-0.77 (8.85e-03)	0.43 (2.20e-01)	0.80 (5.83e-03)	-0.01 (9.87e-01)	0.72 (1.89e-02)	0.49 (1.54e-01)	0.50 (1.44e-01)	1.00 (0.00e+00)	0.42 (2.30e-01)	0.57 (8.62e-02)	0.59 (7.25e-02)	-0.68 (3.02e-02)	-0.64 (4.46e-02)	0.77 (9.55e-03)	-0.70 (2.36e-02)	0.80 (5.67e-03)	0.52 (1.20e-01)	
N_SO4	0.28 (4.36e-01)	0.60 (6.46e-02)	0.62 (5.46e-02)	0.62 (5.59e-02)	0.31 (3.78e-01)	0.62 (5.46e-02)	0.25 (4.89e-01)	0.58 (7.94e-02)	-0.04 (9.06e-01)	0.64 (4.81e-02)	-0.62 (5.62e-02)	0.03 (9.34e-01)	0.45 (1.97e-01)	0.34 (3.35e-01)	-0.11 (6.68e-01)	0.61 (6.11e-02)	0.62 (5.37e-02)	0.42 (2.30e-01)	1.00 (0.00e+00)	0.75 (1.24e-02)	0.54 (1.04e-01)	-0.58 (8.18e-02)	-0.55 (9.95e-02)	0.74 (1.45e-02)	-0.56 (9.39e-02)	0.69 (2.68e-02)	0.75 (1.21e-02)	
P_Chl	0.50 (1.37e-01)	0.76 (1.04e-02)	0.75 (1.20e-02)	0.76 (1.09e-02)	0.69 (2.65e-02)	0.85 (1.88e-03)	0.40 (2.46e-01)	0.85 (1.64e-03)	0.18 (6.15e-01)	0.84 (2.40e-03)	-0.88 (8.73e-04)	0.06 (8.76e-01)	0.81 (4.52e-03)	0.18 (6.20e-01)	0.21 (5.69e-01)	0.71 (2.06e-02)	0.74 (1.50e-02)	0.57 (8.62e-02)	0.75 (1.24e-02)	1.00 (0.00e+00)	0.90 (3.63e-04)	-0.91 (2.21e-04)	-0.88 (7.75e-04)	0.89 (6.43e-04)	-0.91 (2.54e-04)	0.84 (2.20e-03)	0.96 (1.70e-05)	
P_Cond	0.69 (2.77e-02)	0.63 (5.27e-02)	0.66 (3.93e-02)	0.59 (7.20e-02)	0.81 (4.52e-03)	0.80 (5.47e-03)	0.																					