Marconi Broadwell	2D material with 3 atoms and 50 electrons per cell, G_0W_0 calculation with spin-orbit coupling (**Yambo devel. Version.**)					
# cores	Absolute timing (s)	Absolute speed-up	χ_0 response function (s)	χ_0 speed-up	GW PPA (s)	GW PPA speed-up
128	10140	1.00	3959	1.00	2061	1.00
256	5216	1.94	1370	2.89	1052	1.96
512	3601	2.81	1141	3.47	530	3.88
1024	2780	3.65	628	6.30	270	7.63
2048	2261	4.48	358	11.05	122	16.89

Table 3: *Scaling tests performed on Marconi Broadwell for the many-body yambo code.*
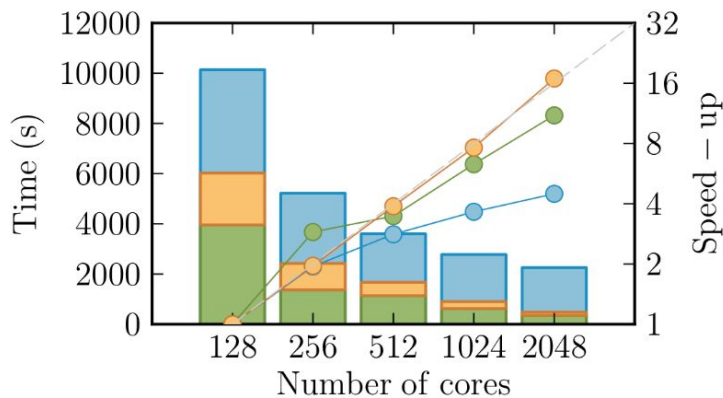

Figure 4: *Scaling tests performed on Marconi Broadwell for the yambo code. The time and speed-up are color coded as follows: blue for the total calculation, green for the response function and orange for the correlation self-energy (GW PPA).*

Finally, we want to stress that systematic and accurate el-ph