## Here is a list of changes included in the revised manuscript

- Revised the title to more clearly reflect the novelty and improvements introduced in this version of the library.
- Added references to DMFT results in the introduction.
- Clarified the nature of the indices  $\{i, j, k, l\}$  in the general interaction term.
- Specified upper and lower bounds in Eq.~(14); the same clarification was propagated to all equations involving traces over Hamiltonian states.
- Corrected the definition of bosonic creation and annihilation operators.
- Added reference to the broadening parameters in the examples.
- Introduced distinct notation to differentiate the exact partition function Z from its truncated approximation  $\tilde{Z}$ .
- Added details explaining subtle issues related to off-diagonal bath optimization.
- Clarified the role of the integer parameters <code>istart</code>, <code>iend</code>, <code>ishift</code> used in parallel matrix construction. Removed misleading terminology and references to parallelism in the Julia interface.
- Clarified the role of phonons' shift term  $A_m$ .
- Improved the explanation of the symmetry sector indexing map.
- Corrected various typographical errors throughout the manuscript.