



Fig. 4 Weave module. This module takes matrices A^k and P^k (containing atom and pair features, respectively) and combines $A \rightarrow A$, $P \rightarrow P$, $P \rightarrow A$, and $A \rightarrow P$ operations to yield a new set of atom and pair features (A^{k+1} and P^{k+1} , respectively). The output atom and pair features can be used as input to a subsequent Weave module, which allows these modules to be stacked in series to an arbitrary depth