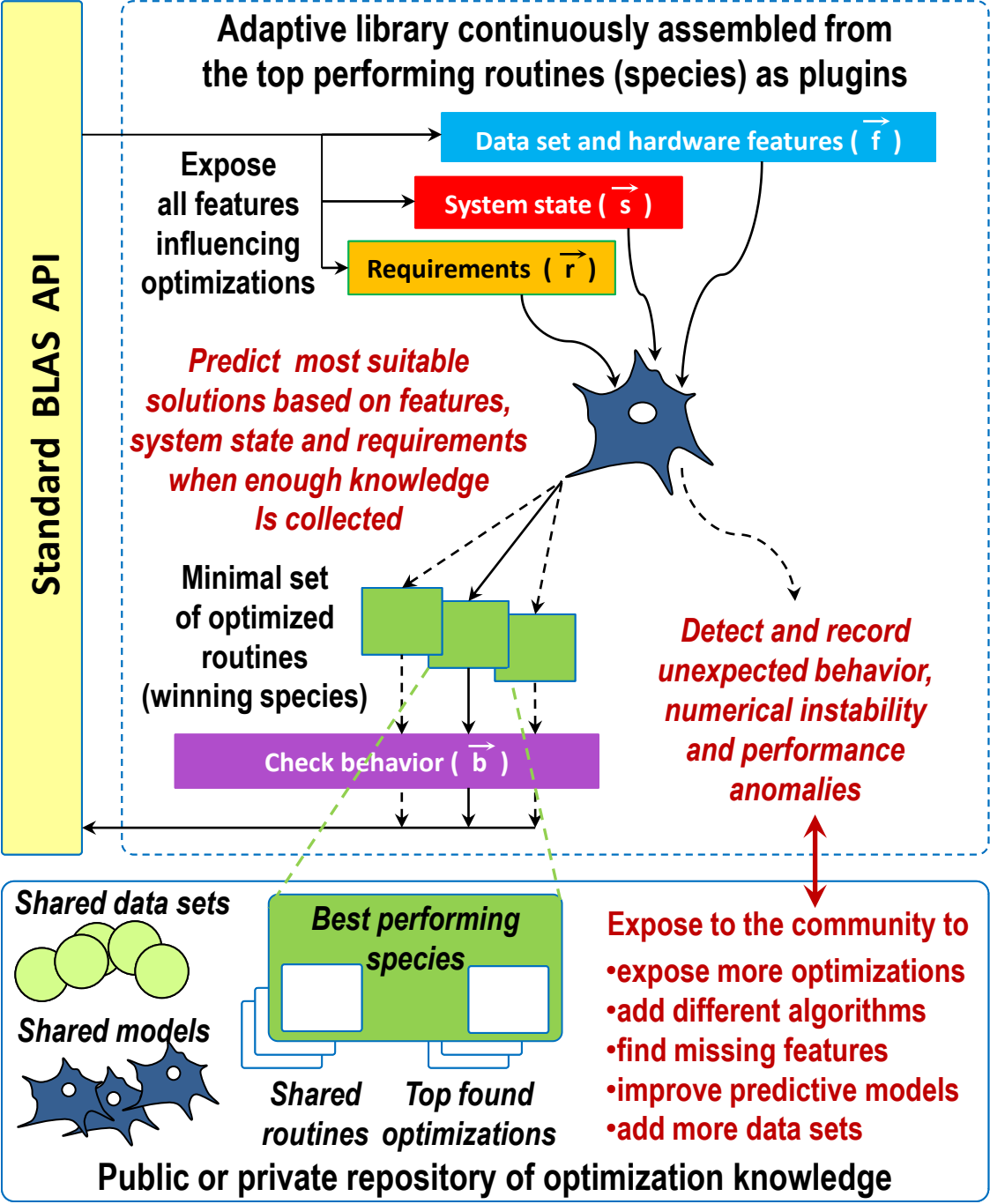
Standard BLAS API
Adaptive library continuously assembled from the top performing routines (species) as plugins
Expose all features influencing optimizations
Data set and hardware features (f)
System state (s)
Requirements (r)
Predict most suitable solutions based on features, system state and requirements when enough knowledge Is collected
Minimal set of optimized routines (winning species)
Check behavior (b)
Detect and record unexpected behavior, numerical instability and performance anomalies
Shared data sets
Shared models
Best performing species
Shared routines
Top found optimizations
Expose to the community to
•expose more optimizations
•add different algorithms
•find missing features
•improve predictive models
•add more data sets
Public or private repository of optimization knowledge