## • The system resource manager launches publishing programs if permanent services do not already exist, or if more are possible and needed.

There are four basic branches for all service libraries:

- The publishing program uses its associated frameworks, and publishes those objects as service objects.
- Migratory objects use marshalling/ unmarshalling methods transform themselves in reference or copy objects. These are either function or return arguments for service objects.
- Programs using service objects require discovery services and or launch services to use these services. The node from which the program itself is running may be a candidate for hosting the service libraries.

Parallel algorithms are passed a list of proxies to the other objects and protocols. One note is that parallel algorithms tend have a recursive nature to them. Thus a point of convergence is generally necessary to determine when the job stops dividing work, and performs it. Note a service that manages

the launcher and coordinates the parallel algorithms would be handy.