Poisson problem on multipatch

$$-\nabla \cdot \alpha \nabla \phi = \rho$$

- **Question:** Does the advection field **A** have to be continuous? Emily thinks so. Then we need to enforce global C^1-regularity on ϕ
- Use CONGA approach with C^1 conforming projection $\rightarrow$ need the mesh information and spline coefficients from neighboring mesh to construct
- spline coefficients of ρ needed to assemble rhs
- Poisson solver needs to access all spline coefficients from all patches $\rightarrow$ need global managing of the splines, mesh etc to assemble everything