Dear Mr./Ms.，

In fact, I want to solve a discretized equation like this



where **K, U=**[*u*1*u*2 **…***un*]Tand **F** are fields sit on the vertices, and can easily be created by ‘DMCreateMatrix’ or ‘DMCreateGlobalVector’. **λ** is the Lagrange multiplier vector. The augmented **Q** (non-square) is the constraint coefficient matrix and has the form as



The **Q** is employed here to satisfy the following constraints



So how to build the entire system in-place in one big matrix **(K**λ)? Could you give me more specific suggestions on this problem?

Thank you very much!

Best regards,

Yahe