**Publications**

1. J. Guzmán, *Quadrature and Schatz's pointwise estimates in finite element methods,*BIT 45(2005), 695­-707.
2. J. Guzmán, [*Local analysis of discontinuous Galerkin methods applied to singularly perturbed problems,* J. Numer. Math.](http://www.springerlink.com/content/w3t61kjq16617044/?p=e867c7469d0a4b5fad80af59258d7881&pi=2) 14 (2006), 41­-56.
3. J. Guzmán,*Pointwise estimates for discontinuous Galerkin methods with lifting operators for elliptic problems*, Math. Comp. **75**(2006), 1067­-1085.
4. J. Guzmán*, Local and pointwise error estimates of the local discontinuous Galerkin method for Stokes Problem*[, Math. Comp. **77**[(2008), 1293­-1322.](http://www.ams.org/mathscinet/search/journaldoc.html?cn=Math_Comp)](http://www.ams.org/mathscinet/search/journaldoc.html?cn=Math_Comp)
5. B. Cockburn, B. Dong and J. Guzmán, *Optimal convergence of the original discontinuous Galerkin method for the transport­-reaction equation on special meshes*[, SIAM J. Numer. Anal. 46 (2008), 1250­-1265.](http://www.ams.org/mathscinet/search/journaldoc.html?cn=SIAM_J_Numer_Anal)
6. B. Cockburn and J. Guzmán, *Error estimates for the Runge­-Kutta discontinuous Galerkin method for the transport equation with discontinuous initial data*, SIAM J. Numer. Anal. [46 (2008), 1364-­1398.](http://www.ams.org/mathscinet/search/journaldoc.html?cn=SIAM_J_Numer_Anal)
7. B. Cockburn, B. Dong and J. Guzmán,*A superconvergent LDG-­hybridizable Galerkin method for second­order elliptic problems*, Math. Comp. 77 (2008), 1887-1916.
8. B. Cockburn, J. Guzmán and H. Wang, *Superconvergent discontinuous Galerkin methods for second­order elliptic problems*, Math. Comp., 78 (2009), 1-24.
9. E. Burman, J. Guzmán and D. Leykekhman, *Weighted error estimates of the continuous interior penalty method for singularly perturbed problems*, IMA J. Numer. Anal., 29 (2009), 284-314.
10. J. Guzmán, and B. Riviere,*Sub­optimal convergence of non­symmetric discontinuous Galerkin method for odd polynomial approximations,* J. Sci. Comp., 40 (2009), 273-280.
11. J. Guzmán, D. Leykekhman, J. Rossmann and A. Schatz, *Hölder estimates for Greens functions on convex polyhedral domains and their applications to finite element methods*, Numer. Math., 112 (2009), 221-243.
12. B. Cockburn, B. Dong and J. Guzmán*, A hybridizable and superconvergent discontinuous Galerkin method for biharmonic problems,*J. Sci. Comput., 40 (2009), 141-187.
13. B. Cockburn, J. Guzmán, C.­-S. Soon and H. Stolarski, *Analysis of the embedded discontinuous Galerkin method for second­-order elliptic problems,*SIAM J. Num. Anal., accepted.
14. B. Cockburn, B. Dong, J. Guzmán, M. Restelli and R. Sacco, *A hybridizable discontinuous Galerkin method for steady state convection-­diffusion-­reaction problems***,**SIAM J. Sci. Comp., accepted.
15. A. Demlow, J. Guzmán, and A.H. Schatz, *Local energy estimates for the finite element method on sharply varying grids,* in revision.
16. B. Cockburn, B. Dong, J. Guzmán and J. Qian, *Optimal convergence of the original DG method in special meshes for variable velocity****,*** in revision.
17. F. Celiker and J. Guzmán, *Analysis of high-order streamline diffusion methods on arbitrary grids and optimal convergence on layer adapted meshes*, submitted.
18. B. Cockburn, J. Gopalakrishnan and J. Guzmán, *A new elasticity element made for enforcing weak stress symmetry*, Math. Comp., accepted.
19. J. Gopalakrishnan and J. Guzmán, *A second elasticity element using the matrix bubble with tightened stress symmetry*, submitted.