REFERÊNCIAS

AKKERMAN, I. *et al.* Free-surface flow and fluid-object interaction modeling with emphasis on ship hydrodynamics. **Journal of Applied Mechanics**, v. 79, n. 1, 2012.
DOI: 10.1115/1.4005072.

ALFONSI, G. Reynolds-averaged navier–stokes equations for turbulence modeling. **Applied Mechanics Reviews**, v. 62, n. 4, July 2009.
DOI: https://doi.org/10.1115/1.3124648.

ANDERSON, J. D. **Computational fluid dynamic - the basics with applications**. New York: McGraw-Hill Book, 1995.

ARGYRIS, J. An Excursion into large rotations. **Computer Methods in Applied Mechanics and Engineering**, v. 32, p. 85–155, 1982.

ARGYRIS, J.; PAPADRAKAKIS, M.; MOUROUTIS, Z. S. Nonlinear dynamic analysis of shells with the triangular element TRIC. **Computer Methods in Applied Mechanics and Engineering**, v. 192, p. 3005–3038, 2003.

ARMALY, B. F. *et al.* Experimental and theoretical investigation of backward-facing step flow. **Journal of Fluid Mechanics**, v. 127, p. 473–496, 1983.

AVANCINI, G. **Formulação unificada para análise tridimensional de interação fluido-estrutura com escoamento de superfície livre: uma abordagem Lagrangiana baseada em posições**. 2023. Tese (Doutorado) – Escola de Engenharia de São Carlos, Universidade de São Paulo, São Carlos, 2023.

AVANCINI, G.; SANCHES, R. A. A Total lagrangian position-based finite element formulation for free-surface incompressible flows. **Finite Elements in Analysis and Design**, v. 169, Feb. 2020. DOI: 10.1016/j.finel.2019.103348.

BADIA, S.; NOBILE, F.; VERGARA, C. Fluid-structure partitioned procedures based on robin transmission conditions. **Journal of Computational Physics**, v. 227, p. 7027–7051, 2008.

BATTINI, J. M.; PACOSTE, C. On the Choice of the linear element for corotational triangular shells. **Computer Methods in Applied Mechanics and Engineering**, v. 195, n. 44-47, p. 6362–6377, 2006.

BAUMAN, P. T. *et al.* On the Application of the Arlequin method to the coupling of particle and continuum models. **Computational Mechanics**, v. 42, p. 511–530, 2008.

BAZILEVS, Y.; TAKIZAWA, K.; TEZDUYAR, T. E. **Computational fluid-structure interaction: methods and applications**. Chichester: John Wiley, 2013a.

BAZILEVS, Y.; TAKIZAWA, K.; TEZDUYAR, T. Challenges and directions in computational fluid-structure interaction. **Mathematical Models and Methods in Applied Sciences**, v. 23, p. 215–221, 2013b.

BAZILEVS, Y.; AKKERMAN, I. Large eddy simulation of turbulent taylor–couette flow using isogeometric analysis and the residual-based variational multiscale method. **Journal of Computational Physics**, v. 229, n. 9, p. 3402-3414, 2010.

BAZILEVS, Y. *et al.* Variational multiscale residual-based turbulence modeling for large eddy simulation of incompressible flows. **Computer Methods in Applied Mechanics Engineering**, v. 197, n. 1-4, p. 173–201, 2007.

BAZILEVS, Y. *et al.* Isogeometric fluid-structure interaction: theory, algorithms, and computations. **Computational Mechanics**, v. 43, p. 3–37, 2008.

BAZILEVS, Y. *et al.* Isogeometric variational multiscale modeling of wall bounded turbulent flows with weakly enforced boundary conditions on unstretched meshes. **Computer Methods in Applied Mechanics and Engineering**, v. 199, n. 13, p. 780–790, 2010.

BAZILEVS, Y. *et al.* 3d simulation of wind turbine rotors at full scale. part ii: fluid-structure interaction modeling with composite blades. **International Journal for Numerical Methods in Fluids**, v. 65, p. 236–253, 2011.

BAZILEVS, Y. *et al.* Aerodynamic and FSI analysis of wind turbines with the ALE-VMS and ST-VMS methods. **Archives of Computational Methods in Engineering**, v. 21, p. 359–398, 2014.

BELYTSCHKO, T. *et al.* Element-free Galerkin methods for static and dynamic fracture. **International Journal of Solids and Structures**, v. 32, n. 17–18, p. 2547–2570, 1995.

BENEK, J. *et al.* **Chimera: a grid-embedding technique**. Arnold Air Force Base: AEDC, 1986. (AEDC-TR-85-64).

BISCANI, F. *et al.* Mixed-dimensional modeling by means of solid and higher-order multi-layered plate finite elements. **Mechanics of Advanced Materials and Structures**, v. 23, n. 9, p. 960–970, 2016.

BLOM, F. J. A Monolithical fluid-structure interaction algorithm applied to the piston problem. **Computer Methods in Applied Mechanics and Engineering**, v. 167, n. 3-4, p. 369–391, 1998.

BONET, J. *et al.* Finite element analysis of air supported membrane structures. **Computer Methods in Applied Mechanics and Engineering**, v. 190, n. 5-7, p. 579–595, 2000.

BORDEN, M. J. *et al.* Isogeometric finite element data structures based on bézier extraction of nurbs. **International Journal for Numerical Methods in Engineering**, v. 87, n. 1-5, p. 15–47, 2011.
DOI: https://onlinelibrary.wiley.com/doi/abs/10.1002/nme.2968.

BOTTASSO, C. L.; DETOMI, D.; SERRA, R. The Ball-vertex method: a new simple spring analogy method for unstructured dynamic meshes. **Computer Methods in Applied Mechanics and Engineering**, v. 194, n. 39, p. 4244–4264, 2005.

BREZZI, F.; FORTIN, M. **Mixed and hybrid finite element methods**. New York: Springer, 1991. (**Springer Series in Computational Mathematics**, 15).

BROOKS, A. N.; HUGHES, T. J. Streamline upwind/Petrov-Galerkin formulations for convection dominated flows with particular emphasis on the incompressible Navier-Stokes equations. **Computer Methods in Applied Mechanics and Engineering**, v. 32, n. 1-3, p. 199–259, 1982.

CALEYRON, F. *et al.* SPH modeling of fluid-solid interaction for dynamic failure analysis of fluid-filled thin shells. **Journal of Fluids and Structures**, v. 39, p. 126–153, 2013.

CARRAZEDO, R.; CODA, H. B. Alternative positional FEM applied to thermomechanical impact of truss structures. **Finite Elements in Analysis and Design**, v. 46, n. 11, p. 1008–1016, 2010.

CATABRIGA, L.; COUTINHO, A. L. G. Implicit SUPG solution of euler equations using edge-based data structures. **Computer Methods in Applied Mechanics and Engineering**, v. 191, n. 32, p. 3477–3490, 2002.

CHUNG, J.; HULBERT, G. M. A Time integration algorithm for structural dynamics with improved numerical dissipation: the generalized-α method. **Journal of Applied Mechanics**, v. 60, n. 2, p. 371–375, 1993.

CHUNG, T. J. **Computional fluid dynamics**. Cambridge: Cambridge University Press, 2002.

CIRAK, F.; RADOVITZKY, R. A Lagrangian-Eulerian shell-fluid coupling algorithm based on level sets. **Computers & Structures**, v. 83, p. 491–498, 2005.

CODA, H. B. **Análise não linear geométrica de sólidos e estruturas: uma formulação posicional baseada no MEF**. 2003. Tese (Professor Titular) — Escola de Engenharia de São Carlos, Universidade de São Paulo, São Carlos, 2003.

CODA, H. B. **O Método dos elementos finitos posicional: sólidos e estruturas - não linearidade geométrica e dinâmica**. São Carlos: EESC-USP, 2018.

CODA, H. B.; PACCOLA, R. R. An Alternative positional FEM formulation for geometrically non-linear analysis of shells: Curved triangular isoparametric elements. **Computional Mechanics**, v. 40, n. 1, p. 185–200, June 2007.

CODA, H. B.; PACCOLA, R. R. A Positional FEM formulation for geometrical non-linear analysis of shells. **Latin American Journal of Solids and Structures**, v. 5, p. 205–223, 2008.

CODA, H. B.; PACCOLA, R. R. Improved finite element for 3D laminate frame analysis including warping for any cross-section. **Applied Mathematical Modelling**, v. 34, n. 4, p. 1107–1137, 2010.

CODA, H. B.; PACCOLA, R. R. A FEM procedure based on positions and unconstrained vectors applied to non-linear dynamic of 3D frames. **Finite Elements in Analysis and Design**, v. 47, n. 4, p. 319–333, 2011.

COX, M. G. The Numerical evaluation of b-splines*. **IMA Journal of Applied Mathematics**, v. 10, n. 2, p. 134–149, 10 1972.
DOI: https://doi.org/10.1093/imamat/10.2.134.

DE BOOR, C. On Calculating with b-splines. **Journal of Approximation Theory**, v. 6, n. 1, p. 50–62, 1972.

DHIA, H. B.; JAMOND, O. On the Use of XFEM within the Arlequin framework for the simulation of crack propagation. **Computer Methods in Applied Mechanics and Engineering**, v. 199, n. 21-22, p. 1403–1414, 2010.

DHIA, H. B.; RATEAU, G. The Arlequin method as a flexible engineering design tool. **International Journal for Numerical Methods in Engineering**, v. 62, n. 11, p. 1442–1462, 2005.

DHIA, H B.; TORKHANI, M. Modeling and computation of fretting wear of structures under sharp contact. **International Journal for Numerical Methods in Engineering**, v. 85, p. 61–83, 2011.

DHIA, H. B. Multiscale mechanical problems: the Arlequin method. **Comptes Rendus de l'Academie des Sciences Série IlB**, v. 326, p. 899–904, 1998.

DHIA, H. B. Further insights by theoretical investigations of the multiscale Arlequin method. **International Journal for Multiscale Computational Engineering**, v. 6, n. 3, p. 215–232, 2008.

DHIA, H. B.; RATEAU, G. Mathematical analysis of the mixed Arlequin method. **Rendus de l'Academie des Sciences Paris Série I**, v. 332, p. 649–654, 2001.

DHIA, H. B.; RATEAU, G. Application of the Arlequin method to some structures with defects. **Revue Européenne des Éléments Finis**, v. 11, n. 2-4, p. 291–304, 2002.

DONEA, J. A Taylor-galerkin method for convective transport problems. **International Journal for Numerical Methods in Engineering**, v. 20, p. 101–119, 1984.

DONEA, J.; GIULIANI, S.; HALLEUX, J. P. An Arbitrary Lagrangian-Eulerian finite element method for transient dynamic fluid-structure interactions. **Computer Methods in Applied Mechanics and Engineering**, v. 33, n. 1-3, p. 689–723, 1982.

FARHAT, C.; HARARI, I.; FRANCA, L. P. The Discontinuous enrichment method. **Computer Methods in Applied Mechanics and Engineering**, v. 190, n. 48, p. 6455–6479, 2001.

FELIPPA, C. A.; PARK, K. C.; FARHAT, C. Partitioned analysis of coupled mechanical systems. **Computer Methods in Applied Mechanics and Engineering**, v. 190, n. 24-25, p. 3247–3270, 2001.

FERNANDES, J. W. D. **Interação fluido-estrutura com escoamentos incompressíveis utilizando o método dos elementos finitos**. 2016. Dissertação (Mestrado) — Escola de Engenharia de São Carlos, Universidade de São Paulo, São Carlos, 2016.

FERNANDES, J. W. D. **Técnica de superposição de modelos estabilizada para análise de interação fluido-estrutura**. 2020. Tese (Doutorado) — Escola de Engenharia de São Carlos, Universidade de São Paulo, São Carlos, 2020.

FERNANDES, J. W. D. *et al.* A Residual-based stabilized finite element formulation for incompressible flow problems in the arlequin framework. **Computer Methods in Applied Mechanics and Engineering**, v. 370, Oct. 2020.
DOI: https://doi.org/10.1016/j.cma.2020.113073.

FERNANDES, J. W. D.; CODA, H. B.; SANCHES, R. A. K. ALE incompressible fluid–shell coupling based on a higher-order auxiliary mesh and positional shell finite element. **Computational Mechanics**, v. 63, n. 3, p. 555–569, 2019.

FERNIER, A.; FAUCHER, V.; JAMOND, O. Multi-model Arlequin approaches for fast transient, FSI-oriented, fluid dynamics with explicit time integration. **Computers and Fluids**, v. 199, Mar. 2020.
DOI: https://doi.org/10.1016/j.compfluid.2020.104428

FISH, J. The s-version of the finite element method. **Computers & Structures**, v. 43, n. 3, p. 539–547, 1992.

FÖRSTER, C.; WALL, W. A.; RAMM, E. Artificial added mass instabilities in sequential staggered coupling on nonlinear structures and incompressible viscous flows. **Computer Methods in Applied Mechanics Engineering**, v. 196, p. 1278–1293, 2007.

GERBEAU, J. F.; VIDRASCU, M. A Quasi-newton algorithm based on a reduced model for fluid-structure interaction problems in blood flows. **ESAIM Mathematical Modelling and Numerical Analysis**, v. 37, n. 4, p. 631–647, 2003.

GERMANO, M. *et al.* A Dynamic subgrid-scale eddy viscosity model. **Physics of Fluids A: fluid dynamics**, v. 3, n. 7, p. 1760–1765, 1991.
DOI: https://doi.org/10.1063/1.857955.

GHIA, U.; GHIA, K. N.; SHIN, C. T. High-Re solutions for incompressible flow using the Navier-Stokes equations and a multigrid method. **Journal of Computational Physics**, v. 48, p. 387–441, 1982.

GRECO, M.; CODA, H. B. A Simple and precise FEM formulation for large deflection 2D frame analysis based on position description. **Computer Methods in Applied Mechanics and Engineering**, v. 193, p. 3541–3557, 2004.

GRUTTMANN, F.; SAUER, R.; WAGNER, W. Theory and numerics of three-dimensional beams with elastoplastic material behaviour. **International Journal for Numerical Methods in Engineering**, v. 48, n. 12, p. 1675–1702, 2000.

GUIDAULT, P.-A.; BELYTSCHKO, T. On the l2 and the h1 couplings for an overlapping domain decomposition method using lagrange multipliers. **International Journal for Numerical Methods in Engineering**, v. 70, n. 3, p. 322–350, 2007.
DOI: https://onlinelibrary.wiley.com/doi/abs/10.1002/nme.1882.

HANSBO, A.; HANSBO, P. An Unfitted finite element method, based on Nitsche's method, for elliptic interface problems. **Computer Methods in Applied Mechanics and Engineering**, v. 191, n. 47–48, p. 5537–5552, 2002.

HöLLIG, K.; REIF, U.; WIPPER, J. Weighted extended b-spline approximation of dirichlet problems. **SIAM Journal of Numerical Analysis**, v. 39, n. 2, p. 442–462, 2001.

HOU, G.; WANG, J.; LAYTON, A. Numerical methods for fluid-structure interaction – a review. **Communications in Computational Physics**, v. 12, p. 337–377, 2012.

HRON, J.; MADLIK, M. Fluid-structure interaction with applications in biomechanics. **Nonlinear Analysis: real world applications**, v. 8, n. 5, p. 1431–1458, 2007.

HÜBNER, B.; WALHORN, E.; DINKLER, D. A Monolithic approach to fluid-structure interaction using space-time finite elements. **Computer Methods in Applied Mechanics Engineering**, v. 193, p. 2087–2104, 2004.

HUGHES, T. **The Finite element method: linear static and dynamic finite element analysis**. New York: Dover, 2000. (Dover Civil and Mechanical Engineering).

HUGHES, T. J.; FRANCA, L. P.; BALESTRA, M. A New finite element formulation for computational fluid dynamics: V. Circumventing the Babuška-Brezzi condition: a stable Petrov-Galerkin formulation of the stokes problem accommodating equal-order interpolations. **Computer Methods in Applied Mechanics and Engineering**, v. 59, n. 1, p. 85–99, 1986.

HUGHES, T. J.; FRANCA, L. P.; HULBERT, G. M. A New finite element formulation for computational fluid dynamics: VIII. The galerkin/least-squares method for advective-diffusive equations. **Computer Methods in Applied Mechanics and Engineering**, v. 73, n. 2, p. 173–189, 1989.

HUGHES, T. J.; LIU, W. K.; ZIMMERMAN, T. K. Lagrangian-Eulerian finite element formulation for incompressible viscous flows. **Computer Methods in Applied Mechanics and Engineering**, v. 29, p. 329–349, 1981.

HUGHES, T. J. R. Stability, convergence and growth and decay of energy of the average acceleration method in nonlinear structural dynamics. **Computers & Structures**, v. 6, p. 313–324, 1976.

HUGHES, T. J. R. Multiscale phenomena: green's functions, the dirichlet-to-neumann formulation, subgrid scale methods, bubbles and the origins of stabilized methods. **Computer Methods in Applied Mechanics and Engineering**, v. 127, p. 387–401, 1995.

HUGHES, T. J. R.; COTTRELL, J. A.; BAZILEVS, Y. Isogeometric analysis: CAD, finite elements, NURBS, exact geometry and mesh refinement. **Computer Methods in Applied Mechanics and Engineering**, v. 194, p. 4135–4195, 2005.

HUGHES, T. J. R. *et al.* The Variational multiscale method - a paradimg for computational mechanics. **Computer Methods in Applied Mechanics and Engineering**, v. 166, p. 3–24, 1998.

HUGHES, T. J. R.; LIU, W. K. Nonlinear finite element analysis of shells: part I. three-dimensional shells. **Computer Methods in Applied Mechanics and Engineering**, v. 26, n. 3, p. 331–362, 1981a.

HUGHES, T. J. R.; LIU, W. K. Nonlinear finite element analysis of shells: Part II. two-dimensional shells. **Computer Methods in Applied Mechanics and Engineering**, v. 27, n. 2, p. 167–181, 1981b.

HUGHES, T. J. R.; OBERAI, A. A.; MAZZEI, L. Large eddy simulation of turbulent channel flows by the variational multiscale method. **Physics of Fluids**, v. 13, p. 1874–1799, 2001.

HUGHES, T. J. R.; TEZDUYAR, T. E. Finite element methods for first-order hyperbolic systems with particular emphasis on the compressible Euler equations. **Computer Methods in Applied Mechanics and Engineering**, v. 45, p. 217–284, 1984.

IBRAHIMBEGOVIC, A.; TAYLOR, R. L. On the Role of frame-invariance in structural mechanics models at finite rotations. **Computer Methods in Applied Mechanics and Engineering**, v. 191, p. 5159–5176, 2002.

IRONS, B. M.; TUCK, R. C. A Version of the Aitken accelerator for computer iteration. **International Journal for Numerical Methods in Engineering**, v. 1, n. 3, p. 275–277, 1969.

JAMOND, O.; DHIA, H. B. Incompressibility in the multimodel Arlequin framework. **International Journal for Numerical Methods in Engineering**, v. 94, p. 374–399, 2013.

JANSEN, K. E.; WHITING, C. H.; HULBERT, G. M. A Generalized-α method for integrating the filtered Navier–Stokes equations with a stabilized finite element method. **Computer Methods in Applied Mechanics and Engineering**, v. 190, n. 3, p. 305–319, 2000.

JOHNSON, A. A.; TEZDUYAR, T. E. Mesh update strategies in parallel finite element computations of flow problems with moving boundaries and interfaces. **Computer Methods in Applied Mechanics and Engineering**, v. 119, p. 73–94, 1994.

KANCHI, H.; MASUD, A. A 3D adaptative mesh moving scheme. **International Journal for Numerical Methods in Fluids**, v. 54, p. 923–944, 2007.

KUHL, D.; RAMM, E. Generalized energy-momentum method for non-linear adaptative shell dynamics. **Computer Methods in Applied Mechanics and Engineering**, v. 178, p. 343–366, 1999.

KÜTTLER, U.; WALL, W. A. Fixed-point fluid–structure interaction solvers with dynamic relaxation. **Computational Mechanics**, v. 43, n. 1, p. 61–72, 2008.

LAUNDER, B. E.; SPALDING, D. B. **Lectures in mathematical models of turbulence**. New York: Academic Press, 1972.

LEFRANÇOIS, E. A Simple mesh deformation technique for fluid-structure interaction based on a submesh approach. **International Journal for Numerical Methods in Engineering**, v. 75, p. 1085–1101, 2008.

MELENK, J. M.; BABUSKA, I. The Partition of unity finite element method: Basic theory and applications. **Computer Methods in Applied Mechanics and Engineering**, v. 139, n. 1, p. 289–314, 1996.

MITTAL, R.; IACCARINO, G. Immersed boundary methods. **Annual Review of Fluid Mechanics**, v. 37, p. 237–261, 2005.

MITTAL, S.; TEZDUYAR, T. Massively parallel finite element computation of incompressible flows involving fluid-body interactions. **Computer Methods in Applied Mechanics and Engineering**, v. 112, n. 1, p. 253–282, 1994.

MOËS, N. *et al.* A Computational approach to handle complex microstructure geometries. **Computer Methods in Applied Mechanics and Engineering**, v. 192, n. 28–30, p. 3163–3177, 2003.

MOK, D. P. **Partitionierte lösungsansätze in der strukturdynamik und derfluid-struktur-interaktion**. 2001. Dissertation (Doktorarbeit) — Institut für Baustatik der Universität Stuttgart, Stuttgart, 2001.

NAYROLES, B.; TOUZOT, G.; VILLON, P. Generalizing the finite element method: diffuse approximation and diffuse elements. **Computational Mechanics**, v. 10, n. 5, p. 307–318, 1992.

OGDEN, R. W. **Non-linear elastic deformations**. Chichester: Ellis Harwood, 1984.

OTOGURO, Y.; TAKIZAWA, K.; TEZDUYAR, T. E. Element length calculation in B-spline meshes for complex geometries. **Computational Mechanics**, v. 65, p. 1085–1103, 2020.

PESKIN, C. S. Flow patterns around heart valves: a numerical method. **Journal of Computational Physics**, v. 10, n. 2, p. 252–271, 1972.

PIEGL, L.; TILLER, W. **The NURBS Book**. 2nd ed. New York: Springer-Verlag, 1996.

PIOMELLI, U. Large-eddy simulation: achievements and challenges. **Progress in Aerospace Sciences**, v. 35, n. 4, p. 335–362, 1999.

REDDY, J. N. **An Introduction to the finite element method**. 3.ed. New York: McGraw Hill, 2006.

REDDY, J. N.; GARTLING, D. K. **The Finite element method in heat transfer and fluid dynamics**. 3rd ed. Boca Raton: CRC Press, 2010.

RICHTER, T. **Fluid-structure Interactions: models, analysis and finite elements**. Berlin: Springer International, 2017.

ROSA, R.; CODA, H.; SANCHES, R. Blended isogeometric-finite element analysis for large displacements linear elastic fracture mechanics. **Computer Methods in Applied Mechanics and Engineering**, v. 392, p. 114622, 2022.

ROSA, R. J. R. **Técnica de partição de domínio para análise numérica de sólidos bidimensionais fraturados combinando análise isogeométrica e elementos finitos**. 2021. Dissertação (Mestrado) — Escola de Engenharia de São Carlos, Universidade de São Paulo, São Carlos, 2021.

ROUX, F. X.; GARAUD, J. D. Domain decomposition methodology with robin interface matching conditions for solving strongly coupled fluid-structure problems. **International Journal for Multiscale Computational Engineering**, v. 7, p. 29–38, 2009.

SANCHES, R. A. K.; CODA, H. B. An Embedded domain technique based on level-sets for finite element method (FEM) fluid-shell coupling. **Mecánica Computacional**, v. 29, p. 4801–4818, 2010a.

SANCHES, R. A. K.; CODA, H. B. Fluid-structure interaction using an arbitrary Lagrangian-Eulerian fluid solver coupled to a positional Lagrangian shell solver. **Mecánica Computacional**, v. 29, p. 1627–1647, 2010b.

SANCHES, R. A. K.; CODA, H. B. Unconstrained vector nonlinear shell formulation applied to fluid-structure interaction. **Computer Methods in Applied Mechanics and Engineering**, v. 259, p. 177–196, 2013.

SANCHES, R. A. K.; CODA, H. B. On Fluid-shell coupling using an arbitrary Lagrangian-Eulerian fluid solver coupled to a positional Lagrangian shell solver. **Applied Mathematical Modelling**, v. 38, p. 3401–3418, 2014.

SANCHES, R. A. K.; CODA, H. B. Flexible multibody dynamics finite element formulation applied to structural progressive collapse analysis. **Latin American Journal of Solids and Structures**, v. 13, n. 16, p. 52–71, 2016.

SIMO, J. C.; FOX, D. D. On a Stress resultant geometrically exact shell model. Part I: formulation and optimal parametrization. **Computer Methods in Applied Mechanics and Engineering**, v. 72, p. 267–304, 1989.

SPEZIALE, C. G. Analytical methods for the development of reynolds-stress closures in turbulence. **Annual Review of Fluid Mechanics**, v. 23, p. 107–157, 1991.

STEIN, K.; TEZDUYAR, T. E.; BENNEY, R. Automatic mesh update with the solid-extension mesh moving technique. **Computer Methods in Applied Mechanics and Engineering**, v. 193, p. 2019–2032, 2004.

STRANG, G.; FIX, G. **An Analysis of the Finite Element Method**. 2nd ed. Cambridge: Wesley-Cambridge Press, 2008.

STROUBOULIS, T.; COPPS, K.; BABUSKA, I. The Generalized finite element method. **Computer Methods in Applied Mechanics and Engineering**, v. 190, n. 32–33, p. 4081–4193, 2001.

TAKIZAWA, K.; TEZDUYAR, T. Space–time fluid–structure interaction methods. **Mathematical Models and Methods in Applied Sciences**, v. 22, 2012.
DOI: https://doi.org/10.1142/S0218202512300013.

TAKIZAWA, K.; TEZDUYAR, T. E.; OTOGURO, Y. Stabilization and discontinuity-capturing parameters for space-time flow computations with finite element and isogeometric discretizations. **Computational Mechanics**, v. 62, n. 5, p. 1169–1186, 2018.

TAKIZAWA, K.; UEDA, Y.; TEZDUYAR, T. E. A Node-numbering-invariant directional length scale for simplex elements. **Mathematical Models and Methods in Applied Sciences**, v. 29, n. 14, p. 2719–2753, 2019.
DOI: https://doi.org/10.1142/S0218202519500581.

TALLEC, P. L.; MOURO, J. Fluid structure interaction with large structural displacements. **Computer Methods in Applied Mechanics and Engineering**, v. 190, p. 3039–3067, 2001.

TEZDUYAR, T. Stabilized finite element formulations for incompressible flow computations. *In*: HUTCHINSON, J. W.; WU, T. Y. (ed.). **Advances in applied mechanics**. San Diego: Academic Press, 1992. p.1-44. (Advances in Applied Mechanics, v. 28).

TEZDUYAR, T.; SATHE, S. Stabilization parameters in supg and pspg formulations. **Journal of Computational and Applied Mechanics**, v. 4, n. 1, p. 71–88, 2003.

TEZDUYAR, T.; ALIABADI, S.; BEHR, M. Enhanced-discretization interface-capturing technique (EDICT) for computation of unsteady flows with interfaces. **Computer Methods in Applied Mechanics and Engineering**, v. 155, p. 235–248, 1998.

TEZDUYAR, T. *et al.* Parallel finite-element computation of 3D flows. **Computer**, v. 26, n. 10, p. 27–36, 1993.

TEZDUYAR, T. E. Stabilized finite element methods for flows with moving boundaries and interfaces. **HERMIS: the international journal of computer mathematics and its applications**, v. 4, p. 63–88, 2003.

TEZDUYAR, T. E.; ALIABADI, S. EDICT for 3D computation of two-fluid interfaces. **Computer Methods in Applied Mechanics and Engineering**, v. 190, p. 403–410, 2000.

TEZDUYAR, T. E.; OSAWA, Y. Finite element stabilization parameters computed from element matrices and vectors. **Computer Methods in Applied Mechanics and Engineering**, v. 190, n. 3, p. 411–430, 2000.

TEZDUYAR, T. E.; SATHE, S. Enhanced-discretization successive update method (EDSUM). **International Journal for Numerical Methods in Fluids**, v. 47, p. 633–654, 2005.

TEZDUYAR, T. E.; BEHR, M.; LIOU, J. A New strategy for finite element computations involving moving boundaries and interfaces - the deforming-spatial-domain/space-time procedure: I. The concept and the preliminary numerical tests. **Computer Methods in Applied Mechanics and Engineering**, v. 94, p. 339–351, 1992.

TEZDUYAR, T. E. *et al.* Incompressible flow computations with stabilized bilinear and linear equal-order-interpolation velocity-pressure elements. **Computer Methods in Applied Mechanics and Engineering**, v. 95, p. 221–242, 1992a.

TEZDUYAR, T. E. *et al.* A New strategy for finite element computations involving moving boundaries and interfaces - the deforming-spatial-domain/space-time procedure: II. Computation of free-surface flows, two-loquid flows, and flows with drifting cylinders. **Computer Methods in Applied Mechanics and Engineering**, v. 94, p. 353–371, 1992b.

TEZDUYAR, T. E. *et al.* Computation of unsteady incompressible flows with the finite element methods: space–time formulations, iterative strategies and massively parallel implementations. *In*: **NEW Methods in Transient Analysis**. New York: ASME, 1992c. p. 7-24. (PVP-Vol.246/AMD-Vol.143).

TONON, P. **Simulação numérica de escoamentos incompressíveis através da análise isogemétrica**. 2016. Dissertação (Mestrado) Universidade Federaldo Rio Grande do Sul, Porto Alegre, 2016.

TONON, P. *et al.* A Linear-elasticity-based mesh moving method with no cycle-to-cycle accumulated distortion. **Computational Mechanics**, v. 67, p. 413-434, 2021.

TRUESDELL, C. A. Hypo-elasticity. **Journal Rational Mechanics and Analysis**, v. 4, p. 83–133, 1955.

VÁZQUEZ, J. G. V. **Nonlinear analysis of orthotropic membrane and shell structures including fluid-structure interaction**. 2007. Tese (Doutorado) - Universitat Politecnica de Catalunya, Barcelona, 2007.

WALL, W. A.; RAMM, E. Fluid structure interaction based upon a stabilized (ALE) finite element method. *In*: IDELSHON, S. *et al.* (ed.). **Computational Mechanics**. Barcelona: CIMNE, 1998.

WANDERLEY, J.; LEVI, C. Validation of a finite difference method for the simulation of vortex-induced vibrations on a circular cylinder. **Ocean Engineering**, v. 29, n. 4, p. 445–460, 2002.

WANG, K. *et al.* Algorithms for interface treatment and load computation in embedded boundary methods for fluid and fluid–structure interaction problems. **International Journal for Numerical Methods in Fluids**, v. 67, n. 9, p. 1175–1206, 2011.

WILCOX, D. C. **Turbulence modeling for CFD**. La Cañada: DCW Industries, 1993.

WILLIAMS, P. T.; BAKER, A. J. Numerical simulations of laminar flow over a 3d backward-facing step. **International Journal for Numerical Methods in Fluids**, v. 24, p. 1159–1183, 1999.

YOKOMIZO, M. H. **Análise numérica de problemas de interação fluido-estrutura com vorticidade**. 2024. Dissertação (Mestrado) – Escola de Engenharia de São Carlos, Universidade de São Paulo, 2024.

ZHANG, Y. *et al.* Patient-specific vascular nurbs modeling for isogeometric analysis of blood flow. **Computer Methods in Applied Mechanics and Engineering**, v. 196, n. 29, p. 2943–2959, 2007.

ZIENKIEWICZ, O. C.; TAYLOR, R. L.; NITHIARASU, P. **The Finite element method: the basis**. 6^{th}ed. Ozônia: Butterworth Heinemann Linacre House, 2005a. v.1.

ZIENKIEWICZ, O. C.; TAYLOR, R. L.; NITHIARASU, P. **The Finite element method: fluid dynamics**. 6^{th}ed. Ozônia: Butterworth Heinemann Linacre House, 2005b. v.3.