

Referências Bibliográficas

- [1] AGUIAR, C. E.; KODAMA, T.; OSADA, T. ; HAMA, Y.. **Smoothed particle hydrodynamics for relativistic heavy-ion collisions**. Journal of Physics G, 27:75–94, 2001.
- [2] AKENINE-MÖLLER, T.. **Fast 3d triangle–box overlap testing**. Journal of Graphics Tools, 6(1):29–33, 2001.
- [3] ANDERSON, J. D.. **Computational Fluid Dynamics**. McGraw–Hill, 1995.
- [4] BALBUENA, P.; SEMINARIO, J.. **Molecular Dynamics**. Elsevier Science, 1999.
- [5] BARAFF, D.. **Interactive simulation of solid rigid bodies**. IEEE Computer Graphics & Applications, 15(3):63–75, 1995.
- [6] BARGTEIL, A. W.; WOJTAN, C.; HODGINS, J. K. ; TURK, G.. **A finite element method for animating large viscoplastic flow**. ACM Transactions on Graphics, 26(3), 2007.
- [7] BATCHELOR, G. K.. **An Introduction to Fluid Dynamics**. Cambridge University Press, 3rd edition, 2000.
- [8] BENSON, D. J.. **Computational methods in lagrangian and eulerian hydrocodes**. Computer Methods in Applied Mechanics and Engineering, 99(2-3):235–394, 1992.
- [9] BRENNEN, C. E.. **Fundamentals of Multiphase Flow**. Cambridge University Press, 2005.
- [10] CARLSON, M.; MUCHA, P.; VAN HORN III, B. ; TURK, G.. **Melting and flowing**. In: SYMPOSIUM ON COMPUTER ANIMATION, p. 167–174, 2002.
- [11] CHORIN, A. J.; MARSDEN, J. E.. **A Mathematical Introduction to Fluid Dynamics**. Springer, 2nd edition, 2000.

- [12] CLAVET, S.; BEAUDOIN, P. ; POULIN, P.. **Particle-based viscoelastic simulation**. Symposium on Computer Animation, p. 219–228, 2005.
- [13] CLEARY, P. W.; MONAGHAN, J. J.. **Conduction modelling using smoothed particle hydrodynamics**. Journal of Computational Physics, 148:227–264, 1999.
- [14] COURANT, R.; FRIEDRICHS, K. ; LEWY, H.. **On the partial difference equations of mathematical physics**. IBM Journal, 11:215–234, 1967.
- [15] CUMMINS, S. J.; RUDMAN, M.. **An SPH projection method**. Journal of Computational Physics, 152:584–607, 1999.
- [16] DE SOUSA, F. S.; MANGIAVACCHI, N.; NONATO, L.; CASTELO, A.; TOMÉ, M.; FERREIRA, V. G.; CUMINATO, J. A. ; MCKEE, S.. **A front-tracking/front-capturing method for the simulation of 3D multi-fluid flows with free surfaces**. Journal of Computational Physics, 198:469–499, 2004.
- [17] DESBRUN, M.; CANI, M. P.. **Smoothed particles: A new paradigm for animating highly deformable bodies**. In: COMPUTER ANIMATION AND SIMULATION '96, p. 61–76. Proceedings of EG Workshop on Animation and Simulation, Springer–Verlag, 1996.
- [18] EBERLY, D. H.. **Game Physics**. Morgan Kaufmann, 2004.
- [19] ETZMUSS, O.; KECKEISEN, M. ; STRASSER, W.. **A fast finite element solution for cloth modelling**. In: 11TH PACIFIC CONFERENCE ON COMPUTER GRAPHICS AND APPLICATIONS, p. 244–251, 2003.
- [20] FEDKIW, R.; STAM, J. ; JENSEN, H. W.. **Visual simulation of smoke**. In: PROCEEDINGS OF ACM SIGGRAPH 2001, Computer Graphics Proceedings, Annual Conference Series, p. 15–22, 2001.
- [21] FOLEY, J. D.; VAN DAM, A.; FEINER, S. K. ; HUGHES, J. F.. **Computer Graphics: Principles and Practice in C**. Addison–Wesley, 2nd edition, 1995.
- [22] FOSTER, N.; METAXAS, D.. **Realistic animation of liquids**. In: GRAPHICS INTERFACE '96, p. 204–212, 1996.
- [23] GAVETE, L.; RUIZ, A.; BENITO, J. J. ; FALCON, S.. **Implementation of essential boundary conditions in a meshless method**. Communications in Numerical Methods in Engineering, 16(6):409–421, 2000.

- [24] GINGOLD, R. A.; MONAGHAN, J. J.. **Smoothed particle hydrodynamics: theory and application to non-spherical stars.** Monthly Notices of the Royal Astronomical Society, 181:375–389, 1977.
- [25] GOKTEKIN, T. G.; BARGTEIL, A. W. ; O'BRIEN, J. F.. **A method for animating viscoelastic.** ACM Transactions on Graphics, 23(3):463–468, 2004.
- [26] HARLOW, F. H.; WELCH, J. E.. **Numerical calculation of time-dependent viscous incompressible flow of fluid with free surface.** The Physics of Fluids, 8:2182–2189, 1965.
- [27] HIRT, C. W.; NICHOLS, B. D.. **Volume of fluid (VOF) method for the dynamics of free boundaries.** Journal of Computational Physics, 39(1):201–225, 1981.
- [28] IORIO, R. J.; DE MAGALHÃES IORIO, V.. **Fourier Analysis and Partial Differential Equations: An Introduction.** Cambridge University Press, 2001.
- [29] KARABASSI, E.-A.; PAPAIOANNOU, G.; THEOHARIS, T. ; BOEHM, A.. **Intersection test for collision detection in particle systems.** Journal of Graphics Tools, 4(1):25–37, 1999.
- [30] KEISER, R.; ADAMS, B.; GASSER, D.; BAZZI, P.; DUTRÉ, P. ; GROSS, M.. **A unified lagrangian approach to solid-fluid animation.** In: SYMPOSIUM ON POINT-BASED GRAPHICS, p. 125–134, 2005.
- [31] KLINGNER, B. M.; FELDMAN, B. E.; CHENTANEZ, N. ; O'BRIEN, J. F.. **Fluid animation with dynamic meshes.** ACM Transactions on Graphics, 25(3):820–825, 2006.
- [32] KODAMA, T.; AGUIAR, C. E.; OSADA, T. ; HAMA, Y.. **Entropy-based relativistic smoothed particle hydrodynamics.** Journal of Physics G, 27:557–560, 2001.
- [33] KOSHIZUKA, S.; NOBE, A. ; OKA, Y.. **Numerical analysis of breaking waves using the moving particle semi-implicit method.** International Journal for Numerical Methods in Fluids, 27(7):751–769, 1998.
- [34] LANGETEPE, E.; ZACHMANN, G.. **Geometric Data Structures for Computer Graphics.** A K Peters, 2006.
- [35] LENGYEL, J.. **Real-time hair.** In: RENDERING TECHNIQUES 2000: 11TH EUROGRAPHICS WORKSHOP ON RENDERING, p. 243–256, 2000.

- [36] LEWINER, T.; LOPES, H.; VIEIRA, A. W. ; TAVARES, G.. **Efficient implementation of marching cubes with topological guarantees.** Journal of Graphics Tools, 8(2):234–241, 2003.
- [37] LI, S.; LIU, W. K.. **Meshfree Particle Methods.** Springer, 2004.
- [38] LIU, G. R.; LIU, M. B.. **Smoothed Particle Hydrodynamics.** World Science, 2005.
- [39] LIU, J.; KOSHIZUKA, S. ; OKA, Y.. **A hybrid particle–mesh method for viscous, incompressible, multiphase flows.** Journal of Computational Physics, 202:65–93, 2005.
- [40] LORENSEN, W. E.; CLINE, H. E.. **Marching cubes: A high resolution 3d surface construction algorithm.** In: PROCEEDINGS OF SIGGRAPH 87, p. 163–169, 1987.
- [41] LOSASSO, F.; SHINAR, T.; SELLE, A. ; FEDKIW, R.. **Multiple interacting liquids.** ACM Transactions on Graphics, 25(3):812–819, 2006.
- [42] LUCY, L. B.. **Numerical approach to testing the fission hypothesis.** Astronomical Journal, 82:1013–1024, 1977.
- [43] MAIR, H. U.. **Review: Hydrocodes for structural response to underwater explosions.** Shock and Vibration, 6(2):81–96, 1999.
- [44] MAO, H.; YANG, Y.. **A particle-based model for non-newtonian fluid.** Technical Report TR05-21, Department of Computing Science, University of Alberta, August 2005. <http://www.cs.ualberta.ca/TechReports/2005/TR05-21/TR05-21.pdf>.
- [45] MENDES, P. R. S.; DUTRA, E. S. S.; SIFFERT, J. R. R. ; NACCACHE, M. F.. **Gas displacement of viscoplastic liquids in capillary tubes.** Journal of Non-Newtonian Fluid Mechanics, 142:1–11, 2007.
- [46] MONAGHAN, J. J.. **On the problem of penetration in particle methods.** Journal of Computational Physics, 82:1–15, 1989.
- [47] MONAGHAN, J. J.. **Simulating free surface flow with SPH.** Journal of Computational Physics, 110:399–406, 1994.
- [48] MONAGHAN, J. J.. **Smoothed particle hydrodynamics.** Reports on Progress in Physics, 68:1703–1759, 2005.

- [49] MORRIS, J. P.. **Simulating surface tension with smoothed particle hydrodynamics**. International Journal for Numerical Methods in Fluids, 33(3):333–353, 2000.
- [50] MORRIS, J. P.; FOX, P. J. ; ZHU, Y.. **Modeling low Reynolds number for incompressible flows using SPH**. Journal of Computational Physics, 136:214–226, 1997.
- [51] MÜLLER, M.; CHARYPAR, D. ; GROSS, M.. **Particle-based fluid simulation for interactive applications**. In: SYMPOSIUM ON COMPUTER ANIMATION, p. 154–159, 2003.
- [52] MÜLLER, M.; KEISSER, R.; NEALEN, A.; PAULY, M.; GROSS, M. ; ALEXA, M.. **Point based animation of elastic, plastic and melting**. Symposium on Computer Animation, p. 141–151, 2004.
- [53] MÜLLER, M.; SCHIRM, S.; TESCHNER, M.; HEIDELBERGER, B. ; GROSS, M.. **Interaction of fluids with deformable solids**. Journal of Computer Animation and Virtual Worlds, 15(3–4):159–171, 2004.
- [54] O'BRIEN, J. F.; BARGTEIL, A. W. ; HODGINS, J. K.. **Graphical modeling and animation of ductile fracture**. ACM Transactions on Graphics, 21(3):291–294, 2002.
- [55] O'ROURKE, J.. **Computational Geometry in C**. Cambridge University Press, 2000.
- [56] OSHER, S. J.; FEDKIW, R. P.. **Level Set Methods and Dynamic Implicit Surfaces**. Springer, 2002.
- [57] OWENS, R. G.; PHILLIPS, T. N.. **Computational Rheology**. Imperial College Press, 2002.
- [58] PAIVA, A.; LOPES, H.; LEWINER, T. ; DE FIGUEIREDO, L. H.. **Robust adaptive meshes for implicit surfaces**. In: 19TH BRAZILIAN SYMPOSIUM ON COMPUTER GRAPHICS AND IMAGE PROCESSING, p. 205–212, 2006.
- [59] PAIVA, A.; PETRONETTO, F.; LEWINER, T. ; TAVARES, G.. **Particle-based non-Newtonian fluid animation for melting objects**. In: 19TH BRAZILIAN SYMPOSIUM ON COMPUTER GRAPHICS AND IMAGE PROCESSING, p. 78–85, 2006.

- [60] PAIVA, A.; PETRONETTO, F.; LEWINER, T. ; TAVARES, G.. **Simulating viscoplastic fluid using smoothed particle hydrodynamic**. In: III BRAZILIAN CONFERENCE ON RHEOLOGY, p. 93–94, 2006.
- [61] READ, K. I.. **Experimental investigation of turbulent mixing by Rayleigh–Taylor instability**. *Physica D*, 12:45–58, 1984.
- [62] RIDER, W.. **Approximate projection methods for incompressible flows: implementation, variants and robustness**. Technical Report LA-UR-2000, Los Alamos National Laboratory, 1995. <http://citeseer.ist.psu.edu/rider95approximate.html>.
- [63] SAAD, Y.. **Iterative Methods for Sparse Linear Systems**. SIAM, 2nd edition, 2003.
- [64] SCHAEFER, S.; WARREN, J.. **Dual marching cubes: primal contouring of dual grids**. In: 12TH PACIFIC CONFERENCE ON COMPUTER GRAPHICS AND APPLICATIONS, p. 70–76, 2004.
- [65] STAM, J.. **Stable fluids**. In: PROCEEDINGS OF SIGGRAPH 99, Computer Graphics Proceedings, Annual Conference Series, p. 121–128, 1999.
- [66] STORA, D.; AGLIATI, P.-O.; CANI, M.-P.; NEYRET, F. ; GASCUEL, J.-D.. **Animating lava flows**. In: GRAPHICS INTERFACE, p. 203–210, 1999.
- [67] TARTAKOVSKY, A. M.; MEAKIN, P.. **A smoothed particle hydrodynamics model for miscible flow in three–dimensional fractures and the two–dimensional Rayleigh–Taylor instability**. *Journal of Computational Physics*, 207:610–624, 2005.
- [68] THOMPSON, J. F.; SONI, B. ; WEATHERILL, N. P.. **Handbook of Grid Generation**. CRC Press, 1998.
- [69] WEI, X.; LI, W. ; KAUFMAN, A.. **Melting and flowing of viscous volumes**. *Computer Animation and Social Agents (CASA)*, p. 54–59, 2003.
- [70] WESSELING, P.. **An Introduction to Multigrid Methods**. Wiley, 2004.
- [71] YOUNG, D.. **Numerical simulation of turbulent mixing by Rayleigh–Taylor instability**. *Physica D*, 12:32–44, 1984.
- [72] ZIENKIEWICZ, O. C.; TAYLOR, R. L. ; ZHU, J.. **The Finite Element Method: Its Basis and Fundamentals**. Butterworth-Heinemann, 6th edition, 2005.

- [73] ZONENSCHIN, R.; GOMES, J.; VELHO, L.; DE FIGUEIREDO, L. H.; TIGGES, M. ; WYVILL, B.. **Texturing composite deformable implicit objects**. In: PROCEEDINGS OF SIBGRAPI '98, p. 346–353, 1998.