

Références bibliographiques

- [1] **S.Bensaada** et **M.T.Bouziane**, transfert de chaleur.
- [2] **Yves jannot** , thermique solaire, **2007**
- [3] **J. brau**, insa de lyon , **2006**
- [4] **Philippe Marty**, cours de transferts thermiques, conduction et rayonnement, université joseph Fourier, Grenoble, version 9 juillet **2012**.
- [5] **M.MEKROUSSI Said**, thèse étude de la convection mixte a travers des surfaces complexes, Université des Sciences et de la Technologie-Oran Mohamed Boudiaf **2014**.
- [6] **Catalin Viorel Popa**, thèse étude théorique et expérimentale du comportement transitoire d'un écoulement laminaire en convection mixte dans un tube vertical. Université de REIMS CHAMPAGNE-ARDENNE, le 17 novembre **2004**.
- [7] **SALHI Hicham**, thèse étude numérique de la convection naturelle dans les enceintes : nanofluide, **2015**.
- [8] **TRABELSI Amel**, mémoire magister étude de l'échange thermique dans une cavité rectangulaire avec deux côtés partiellement actifs. UNIVERSITE KASDI MERBAH – OUARGLA - ,**2011**.
- [9] **S. OSTRACH**, 'natural convection in enclosures', advances in heat transfer, vol. 8, pp. 161 – 227, **1972**.
- [10] **N.N.LIN** et **A.BEJAN**, natural convection in a partially divided enclosure, international journal of heat and mass transfer, vol. 26, n°12, pp. 1867 – 1878, **1983**.
- [11] **S. KIMURA** et **A. BEJAN**, the boundary layer natural convection regime in a rectangular cavity with uniform heat flow from side, journal of heat transfer, vol. 106, n°1, pp. 96 – 103, **1984**.
- [12] **V.F. NICOLETTE**, **K.T. YAND** et **J.R. LLOYD**, transient cooling by natural convection in a two-dimensional square enclosure', international journal of heat and mass transfer, vol. 28, n°9, pp. 1721 – 1732, **1985**.
- [13] **D.G BRIGGS** et **D.N. JONES**, two-dimensional periodic natural convection in a rectangular enclosure of aspect ratio one, journal of heat transfer, vol. 107, n°4, pp. 850 – 854, **1985**.
- [14] **S. KIMURA**, **K. KAMOMIA** et **T. SATO**, oscillatory convection in rectangular cavity, bulletin of the japon society of mechanical engineers, vol. 106, pp. 104 – 108, **1984**.
- [15] **D. POULIKAKOS**, natural convection in a confined fluid space driven by a single vertical wall with warm and cold region, journal of heat transfer, vol. 107, pp. 867 – 876, **1985**.

- [16] **J.C. PATTERSON**, on the existence of an oscillatory approach to steady natural convection in cavities, journal of heat transfer, vol. 106, pp. 104 – 108, **1990**.
- [17] **J.C. PATTERSON** et **J. IMBERGER**, unsteady natural convection in a rectangular cavity, international journal of fluid mechanics, vol. 100, n°1, pp. 65 – 86, **1990**.
- [18] **H.Q. YANG, K.T. YANG** et **Q. XIA**, periodic laminar convection in a vertical cavity, international journal of heat and mass transfer, vol. 32, n°11, pp. 2199 – 2207, **1989**.
- [19] **M. KAZMIERCZAK** et **Z. CHINODA**, buoyancy-driven flow in an enclosure with time periodic boundary conditions, international journal of heat and mass transfer, vol. 32, n°6, pp. 1507 – 1519, **1992**.
- [20] **J.I. LAGE** et **A. BEJAN**, the resonance of natural convection in a horizontal enclosure heated periodically from the side, international journal of heat and mass transfer, vol 36, n°6, pp. 2027 – 2038, **1992**.
- [21] **W.J. MANTLE-MILLER, M. KAZMIERCZAK** et **B. HIAWY**, natural convection in a horizontal enclosure with periodically changing bottom wall temperature, asme 28th national heat transfer conference, htd-vol, 198, natural convection in enclosure, pp. 49 - 56, **1992**.
- [22] **E.K. LAKHAL, M. HASNAOUI, P. VASSEUR** et **E. BILGEN**, convection naturelle dans une cellule carrée chauffée périodiquement par le bas: étude numérique, revue générale de thermique, fr. pp. 392 – 393, 1994, pp. 480 – 485, **1994**.
- [23] **E.K. LAKHAL, M. HASNAOUI, P. VASSEUR** et **E. BILGEN**, natural convection in a square enclosure heated periodically from part of bottom wall, numerical heat transfer, part a, vol. 27, n°3, pp. 319 – 333, **1995**.
- [24] **A. BAÏRI**, « transient thermal characteristics of airborne electronic equipment with discrete hot bands in square cavities ». Applied energy, vol. 85, pages 951-967, **2008**.
- [25] **NOVEMBER M ET NANSTEEL M.W.** « natural convection in rectangular enclosures heated from below and cooled along one side». int. j. heat mass transfer, vol. 30no. 11, pp. 2433-40, **1987**.
- [26] **M.M. GANZAROLLI, L.F. MILANEZ.** « Natural convection in rectangular enclosures heated from below and symmetrically cooled from the sides ». int. j. heat mass transfer, 38, pp.1063-1073, **1995**.
- [27] **G DE VAHL DAVIS.** « Natural convection of air in a square cavity »: a bench mark solution. int. j. numer. methods fluids, vol. 3, pp. 249-264, **1983**.
- [28] **E.K. LAKHAL** et **M. HASNAOUI.** « Convection naturelle dans une cavité carrée chauffée périodiquement par le bas ». revue générale de thermique, 27, pp.480-485, **1995**.

- [29] **M. HASNAOUI, E. BILGEN et P. VASSEOUR.** « Natural convection heat transfer in rectangular cavities partially heated from below ». *j. thermophys. Heat transfer*, 6, pp. 255-264, **1992**.
- [30] **M. BOURICH, M. HASNAOUI et A. AMAHNID,** « Double-diffusive natural convection in a porous enclosure partially heated from below and differentially salted ». *int. j. heat fluid flow* 25(6), pp.1034-1046, **2004**.
- [31] **V. PRASAD, F. A. KULACKI.** « Convective heat transfer in a rectangular porous cavity effect of aspect ratio on flow structure and heat transfer ». *j. heat transfer* 106, pp.158-165 **1984**.
- [32] **S. PAOLUCCI, D.R. CHENOWETH.** « Natural convection in shallow enclosures with differentially heated end walls ». *j. heat transfer* 110, pp. 625-634 **1988**.
- [33] **C.J. HO, J.Y. CHANG.** « A study of natural convection heat transfer in a vertical rectangular enclosure with two-dimensional discrete heating: effect of aspect ratio ». *int. j. heat mass transfer* 37 (6), pp. 917–925 **1994**.
- [34] **R.L. Frederick.** « On the aspect ratio for which the heat transfer in differentially heated cavities is maximum ». *int. comm. heat mass transfer* 26 (4), pp. 549–558, **1999**.
- [35] **W. TONG.** « Aspect ratio effect on natural convection in water near its density maximum temperature ». *int. j. heat fluid flow* 20 (6), pp. 624–633 **1999**.
- [36] **S. WAKITANI.** « Numerical study of three-dimensional oscillatory natural convection at low prandtl number in rectangular enclosures », *j. heat transfer* 123, pp. 77–83, **2001**.
- [37] **P.K. Das, S. Mahmud et S.H. Tasnim, A.K.M.S. Islam.** « Effect of surface waviness and aspect ratio on heat transfer inside a wavy enclosure ». *int. j. numer. meth. heat fluid flow* 13 (8), pp.1097–1122, **2003**.
- [38] **S. TORII.** « Effect of aspect ratio of unsteady thermal–fluid transport phenomena in cavities under reduced gravity ». *int. j. comput. eng. sci.* 4 (1), pp. 85–97, **2003**.
- [39] **A. Valencia, R.L. Frederick.** « Heat transfer in square cavities with partially active vertical walls ». *int. j. heat mass transfer* 32, pp. 1567–1574, **1989**.
- [40] **M.M. EL-refaee, M.M. Elsayed et N.M. AL-najem, A.A. Noor.** « Natural convection in partially cooled tilted cavities ». *int. j. numer. meth. fluids* 28, pp. 477–499, **1998**.
- [41] **Q.-H. DENG, G.F. TANG, Y. LI.** « a combined temperature scale for analyzing natural convection in rectangular enclosures with discrete wall heat sources ». *int. j. heat mass transfer* 45, pp. 3437– 3446, **2002**.

- [42] [43] **N. NITHYADEVI, P. KANDASWAMY et S. SIVASANKARAN.** « Natural convection in a square cavity with partially active vertical walls; time periodic boundary condition ». *math. probl. eng.*, pp. 1–16, **2006**.
- [44] **P. KANDASWAMY, S. SIVASANKARAN et N. NITHYADEVI.** « buoyancy-driven convection of water near its density maximum with partially active vertical walls ». *int. j. heat mass transfer* 50, pp. 942–948, **2007**.
- [45] **A.Abidi, L.Kolsi et M.N.Borjini, H.B.Aissia.** Étude numérique de la convection naturelle doublement diffusive dans une cavité cubique: effets des conditions sur les parois horizontales. 13^{èmes} journées internationales de thermique, albi, france, août, **2007**.
- [46] **A. Dalal, et M. K. Das,** Laminar natural convection in an inclined complicated cavity with spatially variable wall temperature, *international journal of heat and mass transfer*, vol. 48, pages 3833-3854, **2005**.
- [47] **B. OULD Said, N. Retiel.** Étude numérique de la convection naturelle dans une cavité pyramide. 13^{èmes} journées internationales de thermique, albi, france, **2007**.
- [48] **J. D. Hudson,** The effect of a wavy boundary on turbulent flow. phd theses, dept. chemical engineering, university of illinois, urbana, **1993**.
- [49] **R. SCHIESTEL, et M. P. CHAUVE,** influence d'ondulation de faible amplitude sur une convection turbulente en conduite axisymétrique. 5^{ème} congrès français de mécanique. marseille, **1982**.
- [50] **C. Mari, D. Jeandel et J. Mathieu.** méthode de calcul de la couche limite turbulente compressible avec transfert de chaleur. *international journal of heat and mass transfert*, vol. 19, pages 893- 899, **1975**.
- [51] **B. E. Launder et D. B. Spalding,** mathematical models of turbulence. academic press, London and n-y. **1997**.
- [52] **L. Adjlout, O. Imine, A. Azzi et M. Belkadi.** Laminar natural convection in an inclined cavity with a wavy wall. *intl. j. heat mass transfer*, 45(10), pages 2141-2152, **2002**.
- [53] institut polytechnique de grenoble, méthodes, analyse et calculs numériques, eric goncalvès - septembre **2005**.
- [54] **BOUMARAF Assia,** mémoire de magister, étude de la convection naturelle thermosolutale dans une enceinte rectangulaire inclinée, **2010**.
- [55] Fluent incorporated. Gambit 2.2 user's guide, modeling guide. chapitre 4, **2005**.
- [56] **S. V. Patankar,** numerical heat transfer and fluid flow. mcgraw-hill book company, **1980**.

- [57] **P. J. Roache**, computational fluid dynamics. albuquerque : hermosa publishers, 446 p.(isbn 0-913478-05-9).**1982**.
- [58] **P. Buchmann**. Modélisation numérique de la convection naturelle en cavité et d'écoulements libres de jets : application à la climatisation d'un local de grand volume.thèse présentée au conservatoire des arts et métiers, pagination multiple, **1995**.
- [59] **C. Theodosiu**. modélisation des systèmes techniques dans le domaine des équipements des bâtiments à l'aide des codes de type cfd. thèse soutenue devant l'insa de lyon, 161 p,**2001**.
- [60] **B. E. Launder**, et **W. P. Jones**, the prediction of laminarization with a two-equation model of turbulence. international journal of heat and mass transfer, vol. 15, p. 301-314,**1972**.52
- [61] **B. E. Launder** et **D. B. Spalding**. the numerical computation of turbulent flows.computer methods in applied mechanics and engineering, vol. 3, p. 269-289, **1974**.
- [62] **H. K. Versteeg**, and **W. Malalasekera**. an introduction to computational fluid dynamics.essex: longman scientific & technical, 257 p. (isbn 0 58221884 5), **1995**.
- [63] **A. Leonard**, energy cascade in large-eddy simulations of turbulent fluid flows. adv. in geophysics, vol. a, n°18, p. 237-248, **1974**.
- [64] **S. Lepers**, modélisation des écoulements de l'air dans les bâtiments à l'aide des codes cfd: contribution à l'élaboration d'un protocole de validation. thèse de doctorat de l'insa de lyon. p247, **2000**.
- [65] **B. P. Leonard**. A stable and accurate convective modeling procedure based on quadratic upstream interpolation. computer methods applied in mechanical engineering.19 (1):59-98, **1979**.
- [66] **Muhammad A.R. Sharif** , **Taquiur Rahman Mohammad**, Natural convection in cavities with constant flux heating at the bottom wall and isothermal cooling from the sidewalls, AL 35487-0280, **2005**

