

Publikationsliste von
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Stand 07.07.2020

Veröffentlichungen mit Peer-Review-Verfahren (Journal-Publikationen)

1. **Epple, Ph.**, Steppert, M., Wunder, L., Steber, M.: Verification of Torricelli's Efflux Equation with the Analytical Momentum Equation and with Numerical CFD Computations, *Journal of Applied Mechanics and Materials*, ISSN: 1662-7482, Vol. 871, pp 220-229, 2017
2. Steppert, M., **Epple, Ph.**, Steber, M.: The Impact of the Model Support Design on the Flow Field of Supersonic Wind Tunnels, *Journal of Applied Mechanics and Materials*, ISSN: 1662-7482, Vol. 871, pp 193-198, 2017
3. **Epple, Ph.**, Steppert, M. und Steber, M.: *The Impact of Pressure Regulators on the Runtime and Energy Savings of Supersonic Blowdown Wind Tunnels*, *Journal of Applied Mechanics and Materials*, ISSN: 1662-7482, Vol. 856, pp 238-243, 2017
4. Luzi, G., **Epple, Ph.**, Scharrer, M., Fujimoto, K., Rauh, C., Delgado, A.: Study of the effects of inner pressure and surface tension on the fibre drawing process with the aid of an analytical asymptotic fibre drawing model and the numerical solution of the full N.-St. equations, *Archive of Applied Mechanics* November 2013, Volume 83, Issue 11, pp 1607-1636.
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9. **Epple, Ph.**, Delgado, A., Durst, F.: A Theoretical Derivation Of The Cordier Diagram For Turbomachines, *Proc. IMechE Vol. 224 Part C: J. Mechanical Engineering Science*, 2010.
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13. Schneider, O; **Epple, Ph.**, Teuber, E.; Meyer, B.; Jank, M.; Rauh, C.; Delgado, A.; Jet printing of colloidal solutions - Numerical modeling and experimental verification of the influence of ink and surface parameters on droplet spreading, *Advanced Powder Technology* 22 (2011), S. 266-270
14. Pascu, M., Miclea, M., **Epple, Ph.**, Delgado, A. and Durst, F.: Analytical and numerical investigation of the optimum pressure distribution along a low-pressure axial fan blade, *Proc. IMechE Vol. 222 Part C: J. Mechanical Engineering Science*, 2008.

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1. Steppert, M., **Epple, Ph.**, Steber, M., Gast, S.: A New Method For Performance Measurement Of Ppv Fans For Fire Fighting Under Realistic Conditions, Proceedings of the ASME 2020 International Mechanical Engineering Congress and Exposition IMECE2020 November 16-19, 2020, Portland, OR, USA.
2. Steppert, M., **Epple, Ph.**, Gast, S., von Mohos, Z., Wortmann, M.: Investigations On Drag Reduction Due To Cavitator Heads On Supercavitating Bodies, Proceedings of the ASME 2020 International Mechanical Engineering Congress and Exposition IMECE2020 November 16-19, 2020, Portland, OR, USA.
3. **Epple, Ph.**, Babinsky, H., Steppert, M., Fritsche, M.: On How The Generation Of Lift Can Be Explained In A Closed Form Based On The Fundamental Conservation Equations, FEDSM2020, July 13-15, 2020, Virtual Conference, Online.
4. Steppert, M., **Epple, Ph.**, Malcherek, A.: Parametrisation of the Pressure and the Momentum Integral for Inclined Sluiceways Flows, FEDSM2020, July 13-15, 2020, Virtual Conference, Online.
5. Fritsche, M., **Epple, Ph.**, Kubrak, B., Gast, S., Delgado, A., Barannik, V.: Numerical Performance Predictions of Artificial Intelligence-Driven Centrifugal Compressor Designs, FEDSM2020, July 13-15, 2020, Virtual Conference, Online.
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7. **Epple, Ph.**, Fritsche, M., Reinker, F.: Numerical Verification Of The Thermodynamic Determination Of The Hydraulic Efficiency Of Radial Fans, IMECE2019, November 11-14, 2019, Salt Lake City, UT, USA.
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12. Fritsche, M., **Epple, Ph.**, Delgado, A.: The Impact Of The Gas Temperature And Of The Relative Humidity On The Performance Of Fans Operating In Drying Plants, Proceedings of the ASME 2018 International Mechanical Congress and Exposition IMECE2018 November 9-15, 2018, Pittsburgh, PA, USA.
13. **Epple, Ph.**, Fritsche, M., Steppert, M., Steber, M.: New Design Method For Spiral Casings Considering The Properties Of The Impeller And Spiral Casing At Design And Off-Design Conditions And Numerical Verification With CFD, Proceedings of the ASME 2018 International Mechanical Congress and Exposition IMECE2018 November 9-15, 2018, Pittsburgh, PA, USA.
14. Porzelt, A., **Epple, Ph.**, Gast, S.: *Numerical Investigation of the Flow Field in Axial Fan Rotors of free Vortex and non-free Vortex Designs*, The 3rd International Conference on Engineering Science and Innovative Technology (ESIT2018), Phang-Nga, Thailand, April 19 – 22, 2018.
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16. Fritsche, M., **Epple, Ph.**, Russwurm, H., Gast, S.: *Numerical investigation of the impact of radial and axial gaps between stationary inlet nozzle and radial impeller inlet on the performance characteristics of centrifugal fans*, The 3rd International Conference on Engineering Science and Innovative Technology (ESIT2018), Phang-Nga, Thailand, April 19 – 22, 2018.

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26. **Epple, Ph.**, Fritsche, M., Rußwurm, H.: *The Impact of the Interaction Between Impeller and Spiral Casing on the Performance of Radial Fans*, Proceedings of the ASME 2016 International Mechanical Engineering Congress & Exposition, IMECE2016, November 11-17, 2016, Phoenix, Arizona, USA.
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41. Semel, M., **Epple, Ph.**, Litfin, O., Willinger, B., Delgado, A.: Prediction of the Flow Characteristics of an Axial Fan at Off Design, Conference on Modelling Fluid Flow (CMFF'12) The 15th International Conference on Fluid Flow Technologies Budapest, Hungary, September 4-7, 2012
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63. **Epple, Ph.**, Miclea, M. and Delgado, A.: Performance Optimization Method for Radial Fans With Combined Vaneless Circular and Volute Diffusers Applied to an Industrial Fan, ASME International Mechanical Engineering Congress and Exposition, Boston, 2008.
64. Pascu, M., Epple, Ph.: Analytical And Numerical Investigation Of The Derivation Of The Optimum Blade Profile Based On Proper Pressure Prescription In Axial Fan, Inaugural International, Conference of the Engineering Mechanics Institute (EM08) Department of Civil Engineering University of Minnesota Minneapolis, Minnesota May 18-21, 2008
65. Pascu, M., **Epple, Ph.**, Durst, F., Delgado, A. : Parameterization of the Total Pressure Distribution Along a Low-Pressure Axial Fan Blade According to the Design Requirements, ASME International Mechanical Engineering Congress and Exposition, Boston, 2008
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1. **Epple, Ph.**: *Modelle in der Strömungsmechanik*, Vortrag im Symposium UNSCHÄRFE UND PRÄZISION – DER GEBRAUCH VON MODELLEN, HS Coburg, Braumeistervilla auf dem Campus Design, 17.-18.05.2017.
2. **Epple, Ph.**: *How Lift is Generated and the Fundamentals of Drag*, Vortrag im internationalen Workshop zur Aerodynamik gemeinsam mit Prof. Dr. Holger Babinsky, Cambridge University, an der HS Coburg am 21.01.2017.
3. **Epple, Ph.**: *Strömungsmechanische Grundlagen der Turbomaschinen*. Vortrag im Kurzlehrgang Moderne Auslegungsverfahren für Radiale und Axiale Turbomaschinen, Lehrstuhl für Strömungsmechanik, Universität Erlangen-Nürnberg, 08.-10.03.2017

4. **Epple, Ph.:** *Auslegung für Axial und Radialventilatoren und Gebläse.* Vortrag im Kurzlehrgang Moderne Auslegungsverfahren für Radiale und Axiale Turbomaschinen, Lehrstuhl für Strömungsmechanik, Universität Erlangen-Nürnberg, 08.-10.03.2017
5. **Epple, Ph.:** *Workshop Radialmaschinen.* Vortrag im Kurzlehrgang Moderne Auslegungsverfahren für Radiale und Axiale Turbomaschinen, Lehrstuhl für Strömungsmechanik, Universität Erlangen-Nürnberg, 08.-10.03.2017
6. Friedrich, Epple, Steber, Delgado: Vortrag "ESYSDEN: Systemoptimierung der Druckluft-Energieversorgung", Green Factory Bavaria Kolloquium, WiSo Nürnberg, Lange Gasse 20, 90403 Nürnberg, 30. September - 01. Oktober 2015.
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10. Epple, Ph: Vortrag "Introduction to Fluid Mechanics" im Analytical Instruments, Measurement and Sensor Technology Workshop, Hochschule Coburg, AIMS, September 2014.
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15. Semel, M. und **Epple, Ph.:** Workshop Axialmaschinen, Kurzlehrgang MODERNE AUSLEGUNGSVERFAHREN FÜR VENTILATOREN, WINDTURBINEN, PUMPEN UND TURBOLADER, Universität Erlangen, 18.02. - 21.02.2013.
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Buchkapitel

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