Publication du service des constructions mécaniques et robotique (CP 165/42)
Prof. André Preumont

Books

1. A.PREUMONT, Vibrations Aléatoires et Analyse Spectrale, Presses Polytechniques Romandes, Lausanne, Suisse, 1990
5. A.PREUMONT, K.SETO, Active Control of Structures, Wiley, 2008

Chapters of books


Articles in Journals

3. COLLETTE C., TSHILUMBA D., JANSENS S., ARTOOS K. FERNANDEZ-CARMONA P., Final Focus control for future linear particle collider, Nuclear instruments and methods in physics research section A (accepted in 2012).
5. COLLETTE C., Importance of the wheel vertical dynamics in the squeal noise mechanism on a scaled test bench, Shock and vibrations (2011, available online).
35. B. de MARNEFFE & A. PREUMONT, Vibration Damping with Negative Capacitance Shunt, Theory and Experiment, Smart Materials and Structures 17, 035015, 2008


Selected published contributions at conferences

6. A.PREUMONT, Active damping and active isolation of large space structures, Sectional Key Note Lecture, Third European Conference on Structural Control, Vienna, July 2004.


35. A.PREUMONT, Y.ACHKIRE & N.LOIX, Active damping of tension truss structures, 3rd Int. Conf. on Dynamics and Control of Structures in Space, London, May 1996.


64. A.PREUMONT, Thermoelastic Oscillations of FBR Fuel Pins, SMIRT-10, Los Angeles, Division E, August 1989.
67. A.PREUMONT, E.CZAJKOWSKI & R.HAFTKA, Stabilizing the Neglected Dynamics in Active Control of Vibration, 3rd Int. Conf. on Recent Advances in Structural Dynamics, Southampton, July 1988.
73. A.PREUMONT, Spillover Alleviation in Active Control of Flexible Structures, 4th IFAC Symposium on Control of Distributed Parameter Systems, UCLA, June 1986.
87. COLLETTE C., Rail Corrugation Mitigation via a Dynamic Vibration Absorber Mounted on Driven Wheel sets of Metro Vehicles, Third International Conference on Advanced Computational Methods in Engineering, 30 May – 2 June 2005 (Ghent, Belgique).
93. COLLETTE C., VANHONACKER P., BASTAITS R., LEVY D., Comparison between time and frequency studies of a corrugated curve of RER Paris network Corrugations, proceedings of the 7th International Conference on Contact Mechanics and Wear of Rail/Wheel Systems CM2006, 24-28 September 2006 (Brisbane, Australie).


102. COLLETTE C., ARTOOS K., KUZMIN A., SYLTE M., GUINCHARD M. and HAUVILLER C., Active Control of Quadrupole Motion for Future Linear Particle Colliders, proceedings of the Twelfth IASTED International Conference on Intelligent Systems and Control ISC2009, 2-4 November 2009 (Cambridge, USA).

103. JANSSENS S., COLLETTE C., ARTOOS K., KUZMIN A., GUINCHARD M. and HAUVILLER C., Nanometer stabilization of the main beam quadrupoles for the Compact Linear Collider (CLIC), EPFL doctoral conference in Mechanics EDCM2010, 19 February 2010 (Lausanne, Switzerland).


105. ARTOOS K., COLLETTE C., GUINCHARD M., JANSSENS S., LACKNER F. and HAUVILLER C., Stabilisation and fine positioning to the nanometer level of the CLIC Main beam quadrupoles, IEEE International Particle Accelerator Conference IPAC10, 23-25 May 2010 (Kyoto, Japan).

106. COLLETTE C., ARTOOS K., JANSSENS S. and HAUVILLER C., Hard mounts for quadrupole nano-positioning in a linear collider, 12th International Conference on New Actuators ACTUATOR2010, 14-16 May 2010 (Bremen, Germany).

107. LACKNER F., ARTOOS K., COLLETTE C., DURAND H.M. and HAUVILLER C., Development of an Eccentric CAM Based Active Pre-Alignment System for the CLIC Main Beam Quadrupoles, 6th International Conference on Mechanical Engineering Design of Synchrotron Radiation Equipment and Instrumentation (MEDSI 2010), 14 July 2010 (Oxford, United Kingdom).


111. FERNANDEZ-CARMONA P., COLLETTE C., JANSSENS S., ARTOOS K., GUINCHARD M., KUZMIN A., SLAATHAUG A., HAUVILLER C., Study of the electronics architecture for the mechanical stabilization of the quadrupoles of the CLIC linear accelerator, Topical
112. COLLETTE C., JANSSENS S., ARTOOS K., FERNANDEZ-CARMONA P., PREUMONT A.,
Precision pointing and stability control of the future linear collider quadrupoles,
Proceedings of the 11th euspen International Conference, May 2011 (Como, Italy).

113. ARTOOS K., COLLETTE C., ESPOSITO M., FERNANDEZ-CARMONA P., GUINCHARD M.,
HAUVILLER C., JANSSENS S., KUZMIN A., MORON BALLESTER R., Study of the electronic
controller for the Compact Linear Collider (CLIC) main beam quadrupoles vibration
stabilization, Topical Workshop on Electronics for Particle Physics (TWEPP 2011), 26-30
September 2011 (Vienna, Austria).

114. ARTOOS K., COLLETTE C., ESPOSITO M., FERNANDEZ-CARMONA P., GUINCHARD M.,
HAUVILLER C., JANSSENS S., KUZMIN A., LEUXE R., MORON BALLESTER R., Stabilization and
positioning of CLIC quadrupole magnets with sub-nanometre resolution, 13th International
Conference on Accelerator and Large Experimental Physics Control Systems (ICALEPS
2011), 10-14 October 2011 (Grenoble, France).

115. ARTOOS K., COLLETTE C., ESPOSITO M., GUINCHARD M., JANSSENS S., LEUXE R.,
MONDEA M., STRUIK M., MORON BALLESTER R., Modal analysis and measurement of
water cooling induced vibrations on a CLIC main beam quadrupole prototype, proceedings
of the 2nd International Particle Accelerator Conference (IPAC 2011), 4-9 September 2011,
San Sebastian (Spain).

116. ARTOOS K., COLLETTE C., ESPOSITO M., FERNANDEZ-CARMONA P., GUINCHARD M.,
HAUVILLER C., JANSSENS S., KUZMIN A., LEUXE R., MORON BALLESTER R., Status of a study
of stabilization and fine positioning of CLIC quadrupoles to the nanometre level,
proceedings of the 2nd International Particle Accelerator Conference (IPAC 2011), 4-9
September 2011, San Sebastian (Spain).

117. JANSSENS S., ARTOOS K., COLLETTE C., ESPOSITO M., FERNANDEZ-CARMONA P.,
GUINCHARD M., HAUVILLER C., KUZMIN A., LEUXE R., PFINGSTNER J., SCHULTE D.,
SNUVERINK J., System control for the CLIC main beam quadrupole stabilization and nano-
positioning, proceedings of the 2nd International Particle Accelerator Conference (IPAC
2011), 4-9 September 2011, San Sebastian (Spain).

118. SNUVERINK J., ARTOOS K., COLLETTE C., DUARTE RAMOS F., GADDI A., GERWIG H.,
JANSSENS S., PFINGSTNER J., SCHULTE D., RESTA-LOPEZ J., BALIK G., BRUNETTI L.,
JEREMIE A., BURROWS P., CARON B., Status of Ground Motion Mitigation Techniques for
CLIC, proceedings of the 2nd International Particle Accelerator Conference (IPAC 2011), 4-9
September 2011, San Sebastian (Spain).