

Content

	page
Session A	
G. Schönnenbeck, P. Wagner	The Development of Mechanical Infinitely Variable Chain/Belt Drives 1
H. Tanaka	Aspect of Variator Control of Half-Toroidal CVT 23
Session B	
T. H. Bradley, A. A. Frank	Servo-Pump Hydraulic Control System Performance and Evaluation for CVT Pressure and Ratio Control 35
H. Faust, M. Himm, M. Reuschel	Efficiency-Optimised CVT Hydraulic and Clamping System 43
A. Balsamo, S. Monaco, A. Barone, A. Caraceni, C. Cervone	Design and Implementation of a 'False Step Adaptive' Control for CVT using Hardware in the Loop and Rapid Prototyping techniques 59
Session C	
A. Sue, O. Dittrich, G. Poll	CVT-Wirkungsgradberechnung aus der Verformung beim Umschlingungstrieb 69
Th. Walbeck, Chr. Dräger, U. Rohs, P. W. Gold	Das Kegelringgetriebe im PKW Vom Funktionsprinzip zum Fahrzeug 89
A. Albers, A. Stuffer, B. Ilzhöfer	Ceramic as Friction Material in a Continuously Variable Transmission (CVT) 107
Session D	
R. Fuchs, Y. Hasuda, I. James	Modeling, Simulation and Validation for the Control Development of a Full-Toroidal IVT 121
S. Miyata, D. Liu, E. Inoue, H. Machida	Study of the Stable Control System of a Half-Toroidal CVT During Mode Change – A Comparison of Hydraulic and Mechanical Loading Devices 131

Session E

A. Englisch, Chr. Lauinger, M. Vornehm, U. Wagner	500 Nm CVT-LuK Components in Power Split	147
A. Beccari, M. Cammalleri, F. Sorge	Experimental Results for a Two-Mode Split-Way CVT	165
J. van Rooij, A. A. Frank	Development of a 700 Nm Chain-CVT	179

Session F

J. Behrenroth, Chr. Gueter	Aspekte zur Systemarchitektur, Triebstrangregelung und Abstimmung – wie haben Kundenerwartung die Entwicklung des CVT für den neuen MINI beeinflusst	195
A. A. Frank, A. Francisco	Ideal Operating Line CVT Shifting Strategy for Hybrid Electric Vehicles	211
L. R. Folsom, C. Tucker	A Hydromechanical CVT for Full Size Passenger Vehicle/Light Truck Applications	229

Session G

F. Sorge, M. Cammalleri	Two-Dimensional Viscoelasticity in Rubber V-Belt Drives	237
W. A. Goorts	A Study of a New Concept for a Push-Belt CVT with Potential for High Power Applications	251

Session H

W. P. W. Schaerlaeckens, P. Frijlink, B. v. Leeuwen, H. Kapaan, P. Scharnberger	Optimisation of Powertrain Sub-Systems, ISG and CVT, in Relation to Vehicle Properties	265
P. A. Veenhuizen, B. Bonsen, T. W. G. L. Klaassen, K. G. O. van de Meerakker, F. E. Veldpaus	Variator Loading and Control in a V-Belt Type Geared Neutral Transmission in and Around the Geared Neutral Point	297

		page
V. Wicke, C. J. Brace, N. D. Vaughan, I. James	The Characterisation of Driveability of CVT Powertrains During Acceleration Transients	311
A. F. A. Serrarens, B. G. Vroemen, F. E. Veldpaus, P. A. Veenhuizen	Tip Shift in the Zero Inertia Powertrain	327
Session I		
T. Ide, H. Tanaka	Contact Force Distribution between Pulley Sheave and Metal Pushing V-Belt	343
G. Carbone, L. Mangialardi	CVT Behaviour in "Slip Mode" and "Creep Mode" Phases	357
T. Saito	Development of Metal Pushing V-Belt Stress Simulation for CVT	371
F. van der Sluis, A. Brandsma, J. van Lith, K. van der Meer, A. van der Velde, B. Pennings	Stress Reduction in Push Belt Rings Using Residual Stresses	383
Session K		
M. J. L. Verbakel, M. Rondel, R. M. van Druten	Starter Alternator in Zero Inertia Configuration: Expanding the Functionality of the Zero Inertia Drivetrain	403
H. Yeo, T. Kim, C. Kim, H. Kim	Simulation of Regenerative Braking Performance for a Parallel Hybrid Electric Vehicle with CVT	421
T. Takiyama	Investigation about Optimisation of Fuel Consumption and Exhaust Emissions using Engine-CVT-AFR Consolidated Control	435
Session L		
H. Mori, T. Yamamoto, Y. Shibukawa	Improvement of a Dual-Cavity Half-Toroidal CVT	451

		page
A. Banerjee, M. Grumbach, W. Herter	Ein Variatormodell für Grundlagenuntersuchungen an Halb-Toroidgetrieben	463
Session M		
B.-R. Höhn, H. Pflaum, P. Guttenberg	Fuel Consumption of the Autark Hybrid in Test Rig	479
C. Müller, D. Schröder	CVT Shift Control for a Hybrid Driveline	495
M. Sedlmayr, M. Bullinger, F. Pfeiffer	Spatial Dynamics of CVT Chain Drives	511
Session N		
H. Heumann, G. Briffet, M. Burke, M. Field, J. Fuller, A. Lee, J. Newall	System Efficiency Optimisation of the Torotrak Infinitely Variable Transmission (IVT)	529
P. J. Milner	Milner CVT for High Torque Applications	543
W. T. Lester	CVT Utilizing Oscillating Torque	555
Session O		
B. Stöckl	Development of a Pressure-Controlled Clamping System for Continuously Variable Belt and Chain Transmissions	571
B.-R. Höhn, H. Pflaum, Th. Schmidbauer	The Autark Hybrid – Results from Test Vehicle Operating	583
A. Kleimaier, D. Schröder	Optimal Control and Emission Behaviour of a Hybrid Powertrain	603