

### **A polynomial approach to a nonlinear model matching problem**

**Belikov, Juri**; Halas, Miroslav; **Kotta, Ülle**; Moog, Claude Proceedings of the Estonian Academy of Sciences 2016 / p. 330-344 : ill  
<https://doi.org/10.3176/proc.2016.4.02> [https://artiklid.einet.ee/record=b2808634\\*est](https://artiklid.einet.ee/record=b2808634*est)

### **A transfer function approach to the realisation problem of nonlinear systems**

Halas, Miroslav; **Kotta, Ülle** International journal of control 2012 / p. 320-331

### **Accessibility conditions of MIMO nonlinear control systems on homogeneous time scales**

Bartosiewicz, Zbigniew; **Kotta, Ülle**; **Tönso, Maris**; Wyrwas, Małgorzata Mathematical control and related fields 2016 / p. 217-250  
<https://doi.org/10.3934/mcrf.2016002>

### **Adjoint polynomial formulas for nonlinear state-space realization**

**Belikov, Juri**; **Kotta, Ülle**; **Tönso, Maris** IEEE transactions on automatic control 2014 / p. 256-261

### **Comparison of LPV and nonlinear system theory : a realization problem**

**Belikov, Juri**; **Kotta, Ülle**; **Tönso, Maris** Systems & control letters 2014 / p. 72-78

### **Credit-to-GDP ratios – non-linear trends and persistence: evidence from 44 OECD economies**

**Cuestas, Juan Carlos**; Gil-Alana, Luis Alberiko; Malmierca, María Journal of economic studies 2023 / p. 448-463  
<https://doi.org/10.1108/JES-12-2021-0637> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **Decomposing comonad morphisms**

Ahman, Danel; **Uustalu, Tarmo** 8th Conference on Algebra and Coalgebra in Computer Science : CALCO 2019, University College London, United Kingdom, 3-6 June 2019 2019 / art. 14 ; 20 p <https://doi.org/10.4230/LIPIcs.CALCO.2019.14> [Conference proceeding at Scopus](#) [Article at Scopus](#)

### **ECG classification with event-driven sampling**

Saeed, Maryam; **Märtens, Olev**; Larras, Benoit; Frappe, Antoine; John, Deepu; Cardiff, Barry IEEE Access 2024 / p. 25188-25199  
<https://doi.org/10.1109/ACCESS.2024.3364115>

### **Fixed order stabilizing controller design via random reflection segments**

**Nurges, Ülo**; **Avanessov, Sergei** The 12th International Conference on Control, Automation, Robotics and Vision, ICARCV 2012 : 5-7 December, 2012, Guangzhou, China : [proceedings] 2012 / p. 530-535 : ill  
<https://ieeexplore.ieee.org/document/5983069/similar#similar>

### **Generalization of the method of finite differences**

**Arjassov, Gennadi**; **Baraškova, Tatjana**; **Gornostajev, Dmitri**; **Petritšenko, Andres** Annals of DAAAM for 2010 & proceedings of the 21st International DAAAM Symposium "Intelligent Manufacturing & Automation : Focus on Interdisciplinary Solutions" : 20-23rd October 2010, Zadar, Croatia 2010 / p. 547-548 : ill  
[https://www.researchgate.net/publication/288134159\\_Generalization\\_of\\_the\\_method\\_of\\_finite\\_differences](https://www.researchgate.net/publication/288134159_Generalization_of_the_method_of_finite_differences)

### **High level decision diagrams and characteristic polynomials**

**Karputkin, Anton** Info- ja kommunikatsioonitehnoloogia doktorikooli IKTDK viienda aastakonverentsi artiklite kogumik : 25.-26. novembril 2011, Neljärke 2011 / p. 143-146 : ill

### **Minimal realizations of nonlinear systems**

**Kotta, Ülle**; Moog, Claude; **Tönso, Maris** Automatica 2018 / p. 207-212 <https://doi.org/10.1016/j.automatica.2018.05.007> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **New stability conditions for discrete polynomials**

**Nurges, Ülo**; **Rüstern, Ennu** Proceedings of the 2005 American Control Conference : June 8-June 10, 2005, Hilton Portland & Executive Tower, Portland, Oregon. Vol. 6 2005 / p. 4149-4153 : ill

### **New stability conditions via reflection coefficients of polynomials**

**Nurges, Ülo** IEEE transactions on automatic control 2006 / 9, p. 1354-1360 : ill <https://ieeexplore.ieee.org/document/1506942>

### **Non-commutative determinants in nonlinear control theory : preliminary ideas**

**Kotta, Ülle**; **Leibak, Alar**; Halas, Miroslav ICARCV 2008 : 10th International Conference on Control, Automation, Robotics & Vision : 17-20 December 2008, Hanoi, Vietnam 2008 / p. 815-820 <https://ieeexplore.ieee.org/document/4795622>

### **On I-representations of polynomial algebras in quantum matrix spaces of rank 2**

**Bershtein, Olga** Algebra and representation theory 2013 / [11] p

### **On conformal geospatial transformations with complex polynomials**

**Lippus, Jüri**; Oja, Tõnu Proceedings of the Estonian Academy of Sciences 2012 / p. 65-70 : ill  
[https://www.kirj.ee/public/proceedings\\_pdf/2012/issue\\_1/Proc-2012-1-65-70.pdf](https://www.kirj.ee/public/proceedings_pdf/2012/issue_1/Proc-2012-1-65-70.pdf)

### **On robust control and nice stability via reflection coefficients**

**Nurges, Ülo** Proceedings of the Estonian Academy of Sciences. Physics. Mathematics 1999 / 1, p. 31-47: ill

### **Polynomial methods for nonlinear control systems = Polünoommeetodid mittelinearsetes juhtimissüsteemides**

**Belikov, Juri** 2012 [http://www.ester.ee/record=b2854462\\*est](http://www.ester.ee/record=b2854462*est)

### **Probabilistic equivalence checking based on high-level decision diagrams**

**Karputkin, Anton; Ubar, Raimund-Johannes; Tombak, Mati; Raik, Jaan** Proceedings of the 2011 IEEE Symposium on Design and Diagnostics of Electronic Circuits and Systems : April 13-15, 2011, Gottbus, Germany 2011 / p. 423-428 : ill  
<https://ieeexplore.ieee.org/document/5783130>

### **Realisation of linear time-varying systems**

**Kotta, Ülle; Tönso, Maris** International journal of control 2017 / p. 1951-1956 <https://doi.org/10.1080/00207179.2016.1230891>

### **Realization of discrete-time nonlinear input-output equations : polynomial approach**

**Kotta, Ülle; Tönso, Maris** Automatica 2012 / p. 255-262 <https://www.sciencedirect.com/science/article/pii/S0005109811005413>

### **Realization of nonlinear input-output equations using polynomial approach : preliminary ideas**

**Kotta, Ülle; Tönso, Maris** Info- ja kommunikatsioonitehnoloogia doktorikooli IKTDK kolmanda aastakonverentsi artiklite kogumik : 25.-26. aprill 2008, Voore külalistemaja 2008 / p. 21-24

### **Reflection coefficient approach to robust state controller design**

**Nurges, Ülo; Rüstern, Ennu** IEEE International Conference on Control and Automation : ICCA 2009 : Christchurch, New Zealand, December 9-11, 2009 2009 / p. 519-523 <https://ieeexplore.ieee.org/document/5410189>

### **Reflection segments based stability domain approximation of the robust PID controller parameters**

**Avanessov, Sergei; Nurges, Ülo** 2012 20th Mediterranean Conference on Control & Automation (MED), MED 2012 : Conference Proceedings : July 3-6, 2012, Catalonia Barcelona PlazaHotel, Barcelona, Spain 2012 / p. 204-209 : ill  
<https://ieeexplore.ieee.org/document/6265639>

### **Robust control via polytopic stability region approximations**

**Nurges, Ülo; Rüstern, Ennu** Proceedings of the 15th Mediterranean Conference on Control and Automation : MED'07 : Athena (Greece), June 27-29, 2007 2007 / [5] p <https://ieeexplore.ieee.org/document/4433838>

### **Robust pole assignment via reflection coefficients of polynomials**

**Nurges, Ülo** Automatica 2006 / 7, p. 1223-1230 : ill

### **Robust pole assignment via stable polytopes of reflection vectors**

**Nurges, Ülo** Proceedings of the Estonian Academy of Sciences. Physics. Mathematics 2006 / 2, p. 75-95 : ill

### **Robust pole placement via polytope of reflection vectors**

**Nurges, Ülo; Rüstern, Ennu** ECC'07 European Control Conference : July 2-5, 2007, Kos, Greece : proceedings 2007 / p. 798-803  
<https://ieeexplore.ieee.org/document/7068240>

### **Robust stability testing function for a complex interval family of fractional-order polynomials**

**Ghorbani, Majid; Rezaei, Hossein; Tepļakov, Aleksej; Petlenkov, Eduard** Journal of the Franklin Institute 2022 / p. 10038 - 10057  
<https://doi.org/10.1016/j.jfranklin.2022.09.042> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **Stability of discrete-time systems via polytopes of reflection vector sets**

**Avanessov, Sergei; Nurges, Ülo** Estonian journal of engineering 2012 / p. 291-301

### **Testing for long memory in the presence of non-linear deterministic trends with Chebyshev polynomials**

**Cuestas, Juan Carlos; Gil-Alana, Luis Alberiko** Studies in nonlinear dynamics & econometrics 2016 / p. 57-74 : ill  
<https://doi.org/10.1515/sn-de-2014-0005>

### **Testing generic strong accessibility of nonlinear control systems via polynomial (quadratic) immersion**

**Carravetta, Francesco; Sarafrazi, Mohammad Amin; Bartosiewicz, Zbigniew; Kotta, Ülle** 61st IEEE Conference on Decision and Control, CDC 2022, Cancun, 6 December - 9 December 2022, proceedings 2022 / p. 1841-1846  
<https://doi.org/10.1109/CDC51059.2022.9992952> [Conference Proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

### **Об одном итерационном методе разложения многочленов на множители**

**Paluver, Nikolai** 1955 [https://www.ester.ee/record=b1390178\\*est](https://www.ester.ee/record=b1390178*est) <https://digikogu.taltech.ee/et/Item/e4ef64fa-4cd0-4268-8b09-7b9be1051171>

### **2D computational-numerical hardness comparison between fe-based hardfases with WC-Co reinforcements for integral-**

**differential modelling**

**Casesnoves, Francisco** Key engineering materials 2018 / p. 330 - 338 <https://doi.org/10.4028/www.scientific.net/KEM.762.330>  
[Conference Proceedings at Scopus](#) [Article at Scopus](#)

**Using Edgeworth expansion approximating two- and three-dimensional probability distribution functions**

**Pihlak, Margus** 2011 World Congress on Engineering and Technology (CET) Oct. 28 - Nov. 2, 2011, Shanghai, China 2011 / [4] p.  
[https://www.engii.org/cet2011submission/files/upload/maatik\\_2011042820091607296.pdf](https://www.engii.org/cet2011submission/files/upload/maatik_2011042820091607296.pdf)

**A versatile and flexible multiplier generator for Large integer polynomials**

**Imran, Malik; Abideen, Zain Ul; Pagliarini, Samuel Nascimento** Journal of hardware and systems security 2023 / p. 55–71  
<https://doi.org/10.1007/s41635-023-00134-2>

**О некоторых многочленах наименьшего уклонения в метрике L2**

**Schats, Eugen** Математика и теоретическая механика : сборник статей. 5 1970 / с. 23-26

[https://www.ester.ee/record=b2189972\\*est](https://www.ester.ee/record=b2189972*est) <https://digikogu.taltech.ee/et/Item/3c00e8d1-e734-4bf3-b2a0-e0081b3050d2/>